Bath and North East Somerset

Core Strategy Topic Paper 3
Climate change policies and the Corporate approach to sustainability

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Bath & North East Somerset Council

L D F
Bath and North East Somerset
Local Development Framework

Contents

1 Introduction

1.1 The purpose of this topic paper is to explain the development of the Council's climate change policies (CP1 – CP4). This report will set out a summary of the:

- corporate approach to sustainability including an update on the Council's initiatives and recent projects
- consultation responses and specific consultation activities related to climate change
- evidence base developed for these policies

2 Corporate approach to addressing climate change

2.1 The Core Strategy climate change policies will be delivered not only through planning, but also through an interdisciplinary approach flowing from the Local Strategic Partnership's (LSP) climate change priority, which is embedded in the community leadership work of the Council. The Corporate and LSP commitment to tackling the causes and effects of climate change has also underpinned the Core Strategy. The key elements of this work are outlined below:

Sustainable Community Strategy

2.2 The commitment to tackling climate change is enshrined in the Bath and North East Somerset LSP's Sustainable Community Strategy 2009- 2026 (SCS) (CD4/O4):

"Our ambition is to lead B&NES to an environmentally sustainable, low carbon future that is resilient to the expected changes to our climate. This requires changing the way we think and act now".

2.3 As such, climate chance is listed as a Driver for Change, and Environmental Sustainability is one of the SCS's six themes. Within this theme the LSP commits to providing leadership for a reduction of the area's carbon emissions in line with national targets, **by 45% by 2026**. The SCS also contains a commitment to prepare for unavoidable climate change and the related threat of peak oil. To achieve these objectives, a district-wide climate change strategy is currently being prepared, through the Energy Saving Trust's one-to-one support programme for local authorities.

2.4 The body responsible for delivering the SCS district-wide CO_2 reduction target is the LSP theme partnership, *the Environmental Sustainability Partnership* (ESP). The ESP Board consists of senior Council managers and representatives from partner organisations.

2.5 In addition to the ESP, the Council has other senior-level bodies overseeing CO_2 reductions: *the Climate Change Advisory Group* which has Councillors representing each of the political parties, and *the Divisional Director's Climate Change Management group* which ensures climate change action is carried forward through Council operations. The inter-organisational *Natural Hazards Steering Group*, run by the Council's Business Continuity and Emergency Planning Team, oversees work on climate change adaptation.

Resilience to climate change and peak oil

2.6 The Council's Business Continuity and Emergency Planning team have incorporated climate change and peak oil risks into their work, with the aim of forming a comprehensive multi-agency response, and runs the inter-organisational ***Natural Hazards Steering Group***.

2.8 The SCS commits the Council to enhancing the area's resilience to peak oil. Put simply, peak oil is the point of maximum extraction of oil, beyond which oil extraction will decline, despite rising demand. The UK Energy Research Council (2009)[1], following a review of 500 studies, concluded that:

"A global peak is likely before 2030 and there is a significant risk of a peak before 2020"

2.9 As such, the global peak will likely occur within the lifetime of this Core Strategy. Peak oil is predicted to cause significant rises and fluctuations in oil prices and more frequent supply disruptions. Since these impacts are cross-cutting, adaptation to peak oil is also considered throughout the Core Strategy.

2.10 Gas is also projected to become considerably more expensive and possibly unreliable during the timeline of the Core Strategy. This underlines the importance of the Core Policies on climate change which will encourage decentralised energy generation and energy efficient buildings, making us less dependent on gas for heating and electricity.

Council Operations

2.11 The Council has also prioritised tackling climate change in its own operations. Climate change is a Corporate Improvement Priority in *the Corporate Plan (2008-2011) (CD4/O8)* and our *Carbon Management Plan (2009-2014)* (CD4/O9) commits the Council to an ambitious 30% reduction of our own carbon emissions by 2014. Bath & North East Somerset Council is a signatory of the Nottingham Declaration and the 10:10 campaign, and has passed a motion to support the local environmental group, Transition Bath.

Community Leadership

2.12 The Core Strategy renewable energy targets will likewise be met by the Council playing a community leadership role in encouraging clean energy production, enabling the low levels of clean energy production to rise. Activities to encourage renewable and low carbon energy include:

- Renewable Energy Action Area in the Somer Valley: The Centre for Sustainable Energy is working with Somer Valley communities to form a community led energy plan. Spatial aspects of this plan could be incorporated into the Placemaking DPD.
- Bath Community Energy (BCE): The Council is partnering with BCE, a local social enterprise to develop community-led renewable energy projects of various sorts. Currently, BCE is developing solar PV projects for schools, Council and community

[1] http://www.ukerc.ac.uk/support/tiki-index.php?page=Global+Oil+Depletion

buildings. BCE will also identify and develop sites for wind and hydro in collaboration with community groups.

- The potential for the Council to take a leading role in the delivery of future district heating networks is being explored and this has included: (i) work on financial models for district heating with Michael King, Chairman of the Aberdeen Heat & Power Company and Associate of the Combined Heat & Power Association as part of a series of Low Carbon Financing Workshops[2]; (ii) Environmental Sustainability Partnership together with Senior Officers from the Council also recently visited the Birmingham District Heating Network as part of the Birmingham Green Energy Visit[3].
- In addition to work underway by the Council, there are over 20 community groups in the district who are working on tackling climate change. The high levels of concern about this issue and willingness to act are reflected both in the positive responses to the Core Strategy Options consultation, and in the Council's Voicebox survey of residents.
- The Council has a contract with the business network Low Carbon South West, which is running a series of activities to help local businesses take advantage of government incentives and get ready to transition to a low carbon economy, including a sustainable construction work stream.
- Low Carbon Skills Academy: FE colleges in Bath and North East Somerset are collaborating to provide the skills for existing local businesses and students to install energy efficiency and renewable energy technologies in response to increasing demand.
- The Council runs Local Energy Champions: A competition for community energy initiatives. A diverse range of community groups are engaging their neighbours in energy saving projects.

2.13 On the issue of Retrofitting the Council is currently working corporately a number of projects, including:

- Bath Green Doors Open Homes Scheme: Similar schemes run elsewhere (e.g. Bristol and Oxford) achieved up to an 80% take-up rate of energy measures by visitors.
- The Freedom from Fuel Poverty project, run by Housing Services, undertook demonstration "hard to treat" retrofits for residents in fuel poverty to investigate how these types of measures might be encouraged in the future. The findings and ongoing monitoring of this project will inform the Council's approach to the forthcoming Green Deal[4].

[2] Low Carbon Financing Workshop - 25th June 2011. Notes of the workshop can be provided on request.
[3] ESP Birmingham Green Energy Visit - 15th April 2011. Itinerary can be provided on request.
[4] B&NES Freedom from Fuel Poverty project http://www.cse.org.uk/projects/view/1142

- Participation in the Local Affordable Warmth Action Group[5], led by B&NES Primary Care Trust formed in response to the identification of B&NES as an outlier with a high proportion of the total number of deaths taking place during the winter months.

2.14 In addition there is a high level of community interest in this area as demonstrated by the work of the Transition Bath Energy Group[6] and by the Low Carbon Bath Project[7].

West of England Sustainable Construction Network

2.15 The West of England Sustainable Construction Network (WESCON)[8] was set up in 2007 to promote sustainability in the planning, design and construction of buildings across the West of England. The group is non commercial and brings together the four local authorities in the West of England sub region (Bath and North East Somerset, Bristol, North Somerset and South Gloucestershire), together with professional associations and sustainability experts.

2.16 WESCON provides a forum for discussion and innovation in sustainable building design and construction, helping the Council guide and respond to the rapid development in policy and technology in this field. The network meets quarterly, promotes events, and is working on a set of case studies.

3 Consultation

3.1 Throughout the Core Strategy consultation process there was a strong interest in climate change and related issues. This was reflected in responses to the consultation and in discussions with the public at various events. Work with the Centre for Sustainable Energy (CSE) as part of the 'Planning for Low Carbon Living' (PlanLoCal) CLG funded pilot project designed to give communities the knowledge, confidence and ability to influence local planning policy and contribute positively to a low-carbon future[9].

3.2 A summary of the key issues raised during each stage of the Core Strategy consultation is included in the **Table 1** below: (Full summary of comments are included in the Regulation 30 (1) Consultation Report CD5/8&9)

5 B&NES Local Affordable Warmth Action Group Action Plan
http://democracy.bathnes.gov.uk/ieListDocuments.aspx?CId=209&MId=2767

6 http://www.transitionbath.org/groups-energy

7 The Centre for Sustainable Energy has partnered with the Bath Preservation Trust to do research and public engagement around energy measures for historic buildings. http://www.bath-preservation-trust.org.uk/index.php?id=133

8 http://www.buildsw.org.uk/wescon

9 For more information on the PlanLoCal Project see the CSE website: http://www.cse.org.uk/projects/view/1146

Table 1: Summary of key issues raised as part of the Core Strategy consultation in relation to climate change

Consultation Stage	Summary of comments
Launch consultation (October – December 2007)	• Strong support for climate change as a headline theme. • Policies should address climate change, renewable energy; reduce reliance on private car, implications of flood risk, protection and enhancement of the natural environment. • Support for re-localisation (energy generation, self-sufficiency, transportation, food procurement, industry, resource efficiency, economy) in light of peak oil and climate change.
Options consultation (October – December 2009)	**General** • Strong support for climate change as the council's headline issue. It should be mainstreamed throughout other policy areas. • Clear priority should be established addressing 'energy v. heritage & landscape value' and 'climate change v. economic development'. • Clear promotion of the Energy Hierarchy – energy efficient before renewable energy. • Strong support for setting district-wide renewable energy generation targets and supporting even higher generation targets encouraging more energy particularly from wind and hydro. • Poorly considered policies have a damaging effect on historic environment, support for detailed policy potentially in the form of a Supplementary Planning Document. • New developments must meet highest possible standards for carbon emissions and water consumption • Development viability should be considered carefully. **Existing Stock: Retro-fitting** • 48/55 (87%) of respondents on the topic of retro-fitting felt that there was a need for a local policy on this issue; respondents included parish councils, local amenity groups and local heritage groups. • Responses to the options consultation also highlighted the view that poorly considered policies for climate change adaptation and mitigation can have a damaging effect on historic buildings, landscapes and the world heritage site. • The need for more detailed guidance specifically in relation to retro-fitting historic buildings (including adaptation and renewable energy microgeneration)

	was identified as a local priority. This sentiment was also reflected by English Heritage who stated that "an SPD would be supported that helped inform the suitable retrofitting of historic buildings. We would refer you to reference in PPS22 to World Heritage Sites". **New Build: Sustainable Construction** • In relation to new buildings 42/51 (83%) of respondents commented that they would like to see an acceleration of the Code for Sustainable Homes levels. • However, a number of landowners/developers highlighted the impact of this approach on the development industry. **Sustainability Checklist** • The majority of respondents agreed with the principle of a sustainability checklist but many did not agree that the SW Sustainability Checklist was the best checklist to use. The need for a simple and consistent approach was emphasised.
Draft Core Strategy (Publication) Consultation December 2010 – February 2011)	**CP1 Retrofitting** • The Policy should take account of feasibility and viability of retrofitting climate change measures to existing buildings. • Clarification needed as to whether this policy relates only to historic buildings but also to the more difficult treatment of buildings of solid wall/traditional construction. **CP2 Sustainable Construction** • Policy should be more flexible and allow for developer defined sustainability standards. • Costs to the end user should be considered when designing most appropriate approach in terms of sustainable construction. **CP3 Renewable Energy** • Mixed responses to the targets proposed. Some argue that they are too *ambitious* increasing burden on new development. Others argue that they are too *low* not acknowledging the need for the fundamental change demanded by national policy. **CP4 District Heating** • RUH should not be included as one of the proposed District Heating areas.

3.3 As part of the Core Strategy options consultation the following activities were run by CSE with Bath & North East Somerset Council:

i) Training for elected members on planning and renewable energy
ii) Training for Planning Policy, Development Management and Historic Environment officers (attended by 75% of the Planning Department)
iii) Community workshops and drop-in events, including group discussion exercises around pivotal issues such as discussions around renewable energy and heritage and analysing subjective views on large scale wind energy generation. This work-stream also included a successful workshop for young people[10].
iv) Short training sessions on community benefits from renewable energy (this was also open to groups outside of the Bath & North East Somerset area)
v) CSE also provided technical expertise in relation to renewable energy and low carbon planning at a number of consultation activities.

3.4 A full record of these activities is included in the Regulation 30 (1) (d) Consultation Report for the Core Strategy (CD5/8).

4. Key research and studies for Policy CP1-CP4

4.1 Identifying the potential supply and demand for renewable and low carbon energy with a clear understanding of environmental and historic assets in Bath and North East Somerset is an essential starting point for considering the opportunities to move to a low carbon economy.

4.2 In this context the Council has prepared a range of evidence (available as Core Documents) which has been developed to support the Core Strategy climate change policies. The key studies are summarised in **Table 2**.

4.3 The Council is currently in the process of drafting a new Supplementary Planning Document on Sustainable Construction and Retrofitting to supplement Draft Core Strategy policies CP1 and CP2. The purpose of which is to provide guidance in relation to:

- Retrofitting energy efficiency and micro-renewables for dominant house types in B&NES including guidance on which measures require planning permission, listed building consent and which are permitted development required to meet building regulations only.
- Additional guidance in relation to retrofitting historic buildings addressing issues raised by English Heritage and Bath Preservation Trust.
- Providing extra detail to support the Sustainable Construction policy including guidance on how applicants should evidence meeting the policy criteria and principles of sustainable construction.

4.4 Work on this SPD commenced in March 2011, and consultation on a draft SPD is anticipated for October 2011.

[10] For more detail on the consultation with young people see: http://www.cse.org.uk/news/view/1436

Table 2: Summary of evidence base has been prepared by B&NES to support the policy approach

Study	Explanation	Key Findings	Further work
B&NES Renewable Energy Research and Planning (June 2009) (CD4/S7)	Prepared to support the Core Strategy Options document. It assessed the technical potential for renewable energy and recommended to set district wide energy generation targets for electricity and heat responding to the new development. It also recommended a number of specific actions required to achieve these targets. Builds on and adds to SW Regional evidence base.	• Recommends Code for Sustainable Homes targets based on an analysis of costs for predominant development types in B&NES. • Recommends actions to encourage take up of renewable and low carbon energy including the potential to consider district heating systems in more detail • Assessed and recommends district wide target capacities for renewable electricity and heat generation based on an analysis of the resources in the district and other constraints – 2010, 2020 and 2026 targets suggested. These are based on moderated technical capacity assessments.	This study needed to be updated to reflect the spatial strategy and new evidence – see below.
B&NES Renewable Energy Research and Planning Update (November 2010) (CD4/S8)	The Research was updated taking into account new evidence and information as well as responding the level and locations of new development proposed by the Core Strategy Publication document. New regional evidence taken into account including:	• Recommends reviewed Code for Sustainable Homes targets based on the new profile of development types in B&NES showing that national level targets could be accelerated in the short term. Cost implications of these targets explored. • Recommends reviewed district wide	• ESP/Senior Officer Birmingham Green Energy Visit (15.04.11) learning session around local green deal initiatives introduced in Birmingham

	• Revised wind turbine constraints map (Regen SW: Wardell Amstrong 2010. Wind Resource Assessment for the South West Following SQW Energy Methodology) • South West Heat Demand Map (Regen SW) • Hydro Assessment (Environment Agency 2010 Mapping Hydropower Opportunities and Sensitivities in England and Wales. • Biomass Assessment (Regen SW Bioheat programme) • B&NES Landscape Sensitivity Analysis for Wind Energy Development in Bath and North East Somerset (December 2010) • B&NES District Heating Opportunity Assessment Study (November 2010) • B&NES Viability Study (June 2010)	capacities for renewable energy and heat generation based on an analysis of the resources in the district and other constraints and taking on board changes to the spatial strategy and new evidence developed both by B&NES and also national level evidence.	• Partnering arrangements between the Council and Bath Community Energy • Work on Somer Valley Renewable Energy Action Area
B&NES Landscape Sensitivity Analysis for Wind Energy Development in Bath and North East Somerset (December 2010) (CD4/S6)	Since the Research identifies wind energy as one of key technologies in B&NES, the Council has commissioned the Land Sensitivity Assessment. It provides part of the evidence base that will inform policy in relation to wind energy development.	• Sets out a landscape sensitivity analysis in relation to wind energy development and also provides guidance for those seeking to identify suitable areas for the location of wind turbines and for the council in providing initial responses to such proposals. • Considers the relative sensitivity to three scales of wind turbine, small scale (typically under 25m to blade tip), medium scale (typically 25-95m to blade tip) and large scale (typically 95-130m to blade tip)	• Wind Turbines Visual Impact Assessment (LUC) in preparation. Due to be completed July 2011.

B&NES District Heating Opportunity Assessment Study (November 2010) (CD4/S1-S5)	Building on the South West Heat Map prepared by Regen SW, this evidence includes: (i) a strategic analysis to identify opportunity areas for district heating; (ii) undertaking a more detailed feasibility analysis of 3 identified clusters; and (iii) carrying out a commercial viability assessment for the above 3 clusters.	• Identifies 15 clusters with potential for district heating networks (Figure 10, page 30). These form the basis of the "district heating opportunity areas" in CP4. • Undertakes detailed feasibility and financial modelling for district heating in central Keynsham, central Bath and Bath riverside to demonstrate the basis of a business case for these schemes. • Identified the infrastructure costs and delivery mechanisms for district heating for inclusion in the Infrastructure Delivery Plan. • Included a stakeholder workshop held as part of the Low Carbon Future day (record of which included in the report)	• ESP/Senior Officer Birmingham Green Energy Visit (15.04.11) included a visit to District Heating plant room and presentation on implementation through the planning system and delivery models
B&NES Viability Study (June 2010) (CD4/H8)	Viability testing to underpin the Core Strategy affordable housing policies.	• Tested impact of the introduction of the Code for Sustainable Homes to Code Level 4 (in full) together with s106 as part of the study (page 22). • Notes that the precise impacts of these Code level standards will vary across the district depending on market value.	• Further site based testing carried out for 12 real sites in B&NES as part of "Viability Validation Study" (April 2011).