## 7. Improving the Quality of Life

#### Introduction

- 7.1 The planning system has an important role to play in controlling the quality of both the built and natural environment. Selby District contains a range of important environmental assets including listed buildings, conservation areas, wildlife habitats and a range of landscapes. It is equally important to promote the health and wellbeing of existing communities.
- In order to deliver the Council's vision for the area in a sustainable manner the Core Strategy seeks to enable the District and its residents to both mitigate and adapt to the future impacts of climate change. This is particularly important in Selby District that has significant areas that are at risk of flooding. The Core Strategy policies aim to reduce greenhouse gas emissions and protect resources, whilst providing opportunities to exploit realistic alternatives to 'fossil fuels' by promoting renewable energy (which will also combat fuel poverty and improve our energy security in the longer term).
- 7.3 Not only do policies seek to protect and enhance the District's assets, but all new development will be expected to contribute to improving the quality of life of residents through high quality design that is appropriate in its context and exploits opportunities to enhance local character and the way areas function.

# **Tackling Climate Change and Promoting Sustainable Patterns of Development**

#### Introduction

- 7.4 There is an overwhelming body of scientific evidence that indicates that climate change is a serious and urgent issue. And whilst there are some remaining uncertainties about eventual impacts, the evidence is now sufficient that central Government is giving clear and strong guidance to policy makers about the pressing need for action.
- 7.5 Emissions of greenhouse gases, particularly carbon dioxide, are the main cause of climate change. Energy use in buildings accounted for nearly half of emissions in 2005 and more than a quarter came from energy we use in heat and light and to run our homes.
- 7.6 Energy security is also an important challenge. Many of the measures to cut carbon emissions also contribute to creating a healthy diversity of energy supply and addressing fuel poverty through lower bills for householders. The national 'Fuel Poverty Strategy' targets the three main factors that influence fuel poverty household energy efficiency, fuel prices and household income. Core Strategies can seek to influence one of these strands improving energy efficiency.

- 7.7 The planning system can address the causes and potential impacts of climate change by promoting policies which reduce energy use, promote energy efficiency, reduce emissions (including CO<sub>2</sub>), and promote renewable and low carbon energy use. These objectives may also be achieved by influencing the location and design of development and promoting sustainable and inclusive patterns of urban and rural development.
- 7.8 Reduction of carbon dioxide emissions is one of the main elements of the climate change agenda, but preparing for the effects of climate change is just as important. Climate change is likely to have a range of impacts including higher summer temperatures and increased risk of flooding and droughts. The key message is that new developments should be low-carbon development and well adapted to the impacts of climate change.
- 7.9 The Core Strategy will set the vision for the District in the light of particular local circumstances and future Local Plan documents will address development management issues through more detailed criteria based policies and quidance.

#### Context

The Climate Change Background Paper <sup>76</sup> provides the wider 7.10 justification and evidence for the inclusion of a suite of climate change and renewable energy policies within the Core Strategy. Summaries of, and full references to the documents referred to below are contained in that Paper.

## National Policies and Strategies

- 7.11 The need for action to offset climate change is firmly embedded in national planning policy. In particular, the National Planning Policy Framework (NPPF) and the Planning and Energy Act 2008<sup>77</sup> all promote the provision of energy from renewable and/or low carbon sources. In determining planning applications, the NPPF sets out that local planning authorities should expect new development to comply with adopted Local Plan policies on local requirements for decentralised energy supply unless it can be demonstrated by the applicant, having regard to the type of development involved and its design, that this is not feasible or viable; and take account of landform, layout, building orientation, massing and landscaping to minimise energy consumption. Wider issues of energy security, reducing fuel poverty, diversity of supply and energy efficiency, are raised in the Energy White Paper<sup>78</sup>.
- More recently the UK Low Carbon Transition Plan (2009) and UK 7.12 Renewable Energy Strategy (2009) seek to deliver emission cuts and

<sup>77</sup> And emerging Energy Bill 2012

<sup>&</sup>lt;sup>76</sup> Climate Change and Sustainable Development Background Paper No.8

<sup>&</sup>lt;sup>78</sup> Energy White Paper, 2007 Meeting the Energy Challenge: http://www.decc.gov.uk/en/content/cms/legislation/white\_papers/white\_paper\_07/white\_paper\_07.aspx

suggest that the planning system must play a central role in supporting the deployment of renewable energy. The Strategy also promotes clean coal technology including carbon capture and storage (CCS) especially in key areas, such as Yorkshire and Humber.

#### Carbon Dioxide Emissions

7.13 Fossil fuels play a vital role in providing energy in the UK and globally. In the UK, DECC<sup>79</sup> wants to be able to maintain fossil fuels as part of a diverse and secure low-carbon energy mix. However, to avoid dangerous climate change, action is needed to substantially reduce the carbon dioxide emissions for these sources. Development and deployment of CCS has the potential to reduce the CO<sub>2</sub> emissions from power stations by around 90%, and make a significant contribution towards the UK and international climate change goals.

## Design and Energy Efficiency

7.14 Whilst building standards for insulation and energy efficiency are not directly within the remit of the planning system, the Council, when considering development proposals will take into account the need to utilise energy efficient designs for all aspects including layout (e.g. orientation and passive solar energy).

## **Biodiversity**

- 7.15 Climate change is one of the main drivers of biodiversity loss; however, biodiversity can also contribute to climate change mitigation and adaptation. The England Biodiversity Strategy seeks to ensure biodiversity considerations become embedded in all main sectors of public policy. Increasing the resilience of ecosystems will help the widest range of biodiversity to survive and adapt to climate change. Protection and creation of habitats (see also Policy SP18) will assist in achieving these aims.
- 7.16 Locally, the Yorkshire Wildlife Trust is identifying priority 'Living Landscapes', which seek to provide connectivity between important areas of wildlife which will improve the resilience of habitats and wildlife to climate change.

#### Water Resources

7.17 Climate change may put pressure on water resources and could impact on water quality due to the reduced ability of surface and ground water sources to dilute pollution. Due to historic over-abstraction there are significant pressures on water resources throughout the District. Protection of this resource may influence the location of certain development within the District, particularly uses which have a need for

<sup>79</sup> http://www.decc.gov.uk/en/content/cms/what\_we\_do/uk\_supply/energy\_mix/ccs/ccs.aspx

large quantities of water such as industrial processing or cooling.

## Local Policies and Strategies

- 7.18 The Local Strategic Partnership's Sustainable Community Strategy contains a key theme on Climate Change and the Environment which, amongst other things, seeks to protect the natural environment in respect of special character and wildlife habitats, and improve and protect the quality of air, land and water in the District for local benefit, and to help reduce the negative effect of climate change. It expects local strategies to focus on: reducing and mitigating against flood risk; promoting energy conservation and domestic sources of renewable fuels; encouraging local power stations in the responsible use of renewable fuels; and contributing to the regional targets<sup>80</sup> for renewable energy.
- 7.19 The Council is a signatory to the Nottingham Declaration on Climate Change, which commits the Council to contributing to the delivery of the national climate change programme, preparing a plan with the local community to address the causes and effects of climate change, reducing its own emissions, encouraging all sectors of the local community to reduce their own emissions, working with key providers to adapt to changes, and providing opportunities for renewable energy generation within the area. The Council's own Climate Change Strategy also includes a number of detailed action plan targets.

## Relevant Strategic Objectives

3, 6, 7, 8, 14, 15 and 16

#### **Local Issues**

- 7.20 The primary issues facing Selby District are how to ensure that sustainable patterns of development are promoted, which will contribute to mitigation of the effects of climate change and adaptation to such changes. In addition to the key objectives already outlined in Section 3, the key local issues are:
  - Energy generation
  - Protection of groundwater
  - Flood risk management
  - Minimising travel growth

<sup>&</sup>lt;sup>80</sup> NB. The regional targets were embodied in the Regional Strategy which has now been revoked.

## **Energy Generation**

- 7.21 Drax and Eggborough power stations contribute significantly to the District green house gas emissions and as this power generation accounts for most of the District's emissions, we are unlikely to meet reduction targets. However, Government energy policy has highlighted security of supply issues arising from planned closures of a number of older coal-fired and nuclear power stations in the period to 2020, requiring greater reliance on continuing use of fossil fuelled generating plants and new investment in renewable and low carbon forms of energy generation. Implementation of this policy is demonstrated at Drax by the co-firing of biomass and the proposals to develop a biomass fuelled electricity generating plant. The policy recognises that energy is vital to economic prosperity and social well-being and so it is important to ensure the country has secure and affordable energy.
- 7.22 These existing fossil fuel power stations in the District play a vital role in providing energy as part of a diverse and secure energy mix (in addition to their economic role supporting local jobs and services). As such the Government's aim to reduce carbon emissions through the promotion of 'clean coal technologies', such as carbon capture and storage (CCS)<sup>81</sup> will be a key issue for Selby over the plan period and beyond. While it should be recognised that CCS is a developing technology and not currently applicable on a commercial scale, the Government has recently announced it is committed to four commercial-scale CCS projects and money is to be made available for the first commercial scale CCS demonstration project.
- 7.23 Nonetheless, clean coal technologies/CCS will be generally supported in line with national policy, where appropriate alongside other lower carbon schemes and environmental improvement schemes at the District's power stations.

#### Groundwater

- The District contains significant groundwater supplies including both the Sherwood Sandstone aquifer and the Magnesian Limestone aquifer (which provides a vital water supply for the brewing industry in and around Tadcaster). There are also a number of wells for potable water abstraction in the southern part of the District which form part of a larger well-field for public supply. This water resource is already overcommitted.
- 7.25 In some areas the protective drift material is missing and therefore the public water supply is very susceptible to contamination. Consideration must be given to the protection of water quality and prevention of pollution to the ground water supply.
- 7.26 Climate change will lead to drier summers and wetter winters, increased flood risk in winter and a longer growing season. This will put

<sup>&</sup>lt;sup>81</sup> See Climate Change and Sustainable Development Background Paper BP8 for more information about technologies and the background for Policies SP15, SP16 and SP17

increased pressure on related infrastructure and water resources. There is therefore a need to protect existing resources and encourage water conservation measures and encourage water efficiency to help the District adapt to climate change and ensure sufficient water resources to meet its needs.

## Flood Risk Management

- 7.27 Risk of flooding is a major issue for Selby District<sup>82</sup>. The Council's Level 1 Strategic Flood Risk Assessment (L1SFRA) shows that significant flood risks exist across relatively large areas of the District, which primarily affects Selby, and a number of villages.
- As a significant number of potential development sites in Selby and other sustainable locations fall within higher flood risk areas, a 'Sequential Test' and a Level 2 Strategic Flood Risk Assessment have also been undertaken<sup>83</sup>. The Sequential Test reveals that Sherburn in Elmet, Tadcaster and a number of the larger villages are relatively unconstrained in flood risk terms and can accommodate additional growth on low flood risk land. Selby is however relatively constrained and the Level 2 SFRA demonstrates how the impacts of potential flooding on the Olympia Park Strategic Development Site can be satisfactorily minimised and mitigated<sup>84</sup> without increasing flood risk elsewhere.
- 7.29 The District's susceptibility to flooding also provides opportunities unique to the area. For example, flood waters can be accommodated without harm to the built environment by creating natural flood water sinks such as wet woodlands, reedbeds and low lying pastures in flood risk areas. This both helps to prevent flooding and creates a wider range of natural habitats. The incorporation of Sustainable Drainage Systems (SuDS) promotes groundwater discharge; a particular local issue in this over-abstracted area as well as reducing run-off thus the risk of flooding. And where SuDS are designed to increase the value for wildlife, this enhances biodiversity resilience to climate change.

## **Minimising Travel Growth**

- One of the overriding objectives of the Core Strategy is to minimise the need to travel particularly in view of current high levels of outcommuting. The economic prosperity and housing land supply policies tackle this issue by directing new development to the most sustainable locations and by supporting Selby, Sherburn in Elmet and Tadcaster as hubs for rural economies, community and social infrastructure.
- 7.31 A complementary mechanism for reducing the need to travel is to encourage developers to provide a range of sustainable travel options through Travel Plans and Transport Assessments (in conformity with

<sup>&</sup>lt;sup>82</sup> See Figure 6 Key Diagram for indication of extent of areas of high flood risk, Zone 3

<sup>83</sup> Selby Strategic Flood Risk Assessment (SFRA)

<sup>&</sup>lt;sup>84</sup> For further information see Background Paper No. 7 Strategic Development Sites

prevailing guidance). Active traffic management and integrated demand management interventions are preferred to capacity improvements. The Council has actively contributed to the Third North Yorkshire Transport Plan (LTP3).

- 7.32 Despite the Core Strategy approach to reduce the need to travel, it is inevitable that some travel will always occur. Wherever possible, modern technology should be incorporated in to developments to reduce the impacts of development. Most recently the availability of electric cars means that charging points will become more widespread, and provision of these or other new technologies is encouraged.
- 7.33 The generally level terrain of the District lends itself to cycle use and the District is crossed by two National Cycle Routes (Route 65 part of the Trans-Pennine Trail through Selby between Hull and Middleborough and; Route 66 through Tadcaster between Hull and Manchester via York). The focus of development on the main towns and Designated Service Villages, especially near to Selby itself, provide considerable scope for promoting cycling journeys for both work and pleasure through the construction of dedicated cycle lanes and provision of cycle facilities as part of new developments.
- 7.34 The Core Strategy can contribute to the objectives of tackling climate change and promoting sustainable development in a number of ways and these are cross cutting though all the Core Strategy policies. The following over-arching policy is intended to ensure development is sustainably located and that the design and layout of development reflects sustainable development principles, in a way which will minimise and mitigate the potential impacts of climate change.
- 7.35 The consideration of climate change issues will form an integral part of the site selection criteria when the Council promotes development options as part of the Site Allocations Local Plan (and more detailed requirements for assessing planning application through polices in the Development Management Local Plan).

## Policy SP15 Sustainable Development and Climate Change

## A. Promoting Sustainable Development

In preparing its Site Allocations and Development Management Local Plans, to achieve sustainable development, the Council will:

- a) Direct development to sustainable locations in accordance with Policy SP2;
- b) Give preference to the re-use, best-use and adaption of existing buildings and the use of previously developed land where this is sustainably located and provided that it is not of high environmental value;
- c) Achieve the most efficient use of land without

compromising the quality of the local environment;

- d) Ensure that development in areas of flood risk is avoided wherever possible through the application of the sequential test and exception test; and ensure that where development must be located within areas of flood risk that it can be made safe without increasing flood risk elsewhere;
- e) Support sustainable flood management measures such as water storage areas and schemes promoted through local surface water management plans to provide protection from flooding; and biodiversity and amenity improvements.
- f) Ensure development proposals respond to land characteristics to minimise risks of erosion, subsidence and instability, and to exploit opportunities for reclamation and reinstatement of contaminated land.

## B. Design and Layout of Development

In order to ensure development contributes toward reducing carbon emissions and are resilient to the effects of climate change, schemes should where necessary or appropriate:

- a) Improve energy efficiency and minimise energy consumption through the orientation, layout and design of buildings and incorporation of facilities to support recycling;
- b) Incorporate sustainable design and construction techniques, including for example, solar water heating storage, green roofs and re-use and recycling of secondary aggregates and other building materials, and use of locally sourced materials;
- c) Incorporate water-efficient design and sustainable drainage systems which promote groundwater recharge;
- d) Protect, enhance and create habitats to both improve biodiversity resilience to climate change and utilise biodiversity to contribute to climate change mitigation and adaptation;
- e) Include tree planting, and new woodlands and hedgerows in landscaping schemes to create habitats, reduce the 'urban heat island effect' and to offset carbon loss;
- f) Minimise traffic growth by providing a range of sustainable travel options (including walking, cycling and public transport) through Travel Plans and Transport Assessments and facilitate advances in travel technology such as Electric Vehicle charging points;

- g) Make provision for cycle lanes and cycling facilities, safe pedestrian routes and improved public transport facilities; and
- h) Incorporate decentralised, renewable and low-carbon forms of energy generation (in line with Policy SP16 and Policy SP17).