

Date: 31 July 2007

Report: THE ROLE OF THE YORKSHIRE DALES NATIONAL PARK AUTHORITY  
IN TACKLING CLIMATE CHANGE

### **Purpose of the report**

1. To draw members' attention to the predicted likely impacts of climate change on the national park, and to consider the action that the Authority might take in order to:
  - (a) mitigate its own contribution to climate change; and,
  - (b) work with other bodies and organisations to help the park adapt to the effects of climate change; and,
  - (c) help residents and local businesses to mitigate the effects of climate change.

### **Strategic Planning Framework**

2. The information and recommendation(s) contained in this report are consistent with the Authority's statutory purposes and its approved strategic planning framework:
  - ***National Park Management Plan objectives***  
Climate change is a recurring cross cutting theme within the National Park Management plan
  - ***Best Value Performance Plan objectives***  
Plan and manage all aspects of the Authority's business so as to make the most effective use of our resources and consistently reduce the environmental impact of the Authority's own projects and operations

### **Background**

3. This document aims to provide members with an opportunity to discuss, and steer, the next steps in this Authority's response to the issue of climate change. It is recognised that further development of the Authority's approach will be required..
4. There is now clear scientific consensus that there is an urgent need to reduce greenhouse gas emissions in order to avoid the more extreme impacts that may arise from significant global temperature rise.
5. The 2006 Stern Review on the economics of climate change concluded that the longer it is before action is taken to mitigate its effects, the more dramatic and costly will be the changes that need to be made.
6. The Stern Review was one of many recent reports on climate change. The subject area is one of the fastest moving subjects in the political agenda and has attracted

considerable high profile attention, particularly in recent months. Whilst changes in climate over long periods of time is a natural process and has contributed to the habitats, wildlife, geology and soils of the Yorkshire dales, recent evidence has been unequivocal that the accelerated rate of change is now a matter of deep concern and that there is a need for an immediate and concerted action.

7. Action to tackle climate change is commonly seen as comprising two elements:
  - (a) **mitigation** – reducing the effects of climate change by reducing greenhouse gas emissions (e.g. by using less energy, improving energy efficiency and developing renewable energy solutions); and,
  - (b) **adaptation** - dealing with the effects of climate change (e.g. preparing for extreme weather events; facilitating the movement of species; improving water storage and flood management etc).
8. Climate change policy is already a focus for many government, business and community based organisations. Many of these organisations have extensive knowledge and expertise, particularly in relation to climate change mitigation. However, whilst recognising the importance of the national and regional framework for dealing with the impact of climate change, this paper concentrates primarily on those actions that can be put in place immediately.

### **The National Park and Climate Change**

9. The main source of information on the possible implications of climate change on the Yorkshire Dales National Park comes from a regional study 'Warming up the Region' produced by the UK Climate Impacts Programme (UKCIP) in 2002. (see <http://www.yorkshirefutures.com>). It predicts that the climate of the Yorkshire and Humber region will change significantly by the 2050's and dramatically by the 2080's. Temperatures are predicted to rise by between 1-2.5<sup>0</sup>C by 2050 and 1.5-4<sup>0</sup>C by 2080. This warming up will be accompanied by a four fold increase in the frequency of wet winters and dry summers (despite 2007!), with a resulting reduction in the average annual rainfall of up to 10%.
10. It is clear that such changes would have very significant implications for what we currently consider the 'Special Qualities' of the National Park. For example:
  - **Rare Limestone Habitats** - the habitats most sensitive to change in the Dales are likely to be the upland limestone grasslands and the peat bogs. Warmer conditions and longer growing seasons might allow hay meadows to be more productive and established at higher altitudes but there could be an increased risk from flooding.
  - **Extensive Moorlands** – could suffer damage from summer fires and increased insect damage and bracken invasion if conditions become warmer and drier. Higher temperatures would allow heather to establish at higher altitudes but peat bogs could decline in dry conditions.
  - **Nationally Important Species** – some species may be lost or pushed into only the most upland areas, whilst others may establish in the dales as their range extends northwards.

- **Outdoor Recreation** – drier, warmer summers might encourage more visitors but this could result in greater erosion in dry conditions, increased moorland fire risks and greater carbon dioxide emissions if most of these extra people come by car. In wetter winters and springs, more damage could be done to rights of way, verges etc. The changing conditions could also prove opportunities for new recreational pursuits.
- **Exceptional Archaeology** – features and sites could also be damaged by the mix of drier and wetter seasonal conditions; reducing soil cover and destabilising structures.
- **Classic Limestone Scenery** – drier conditions would affect the long term survival of caves and other features produced by the effects of water on limestone.
- **Livestock Farming** - grazing livestock in wetter conditions could damage meadows and pastures and could lead to demands for more new farm buildings. Longer growing seasons would allow new crops to be grown, changing the type of farming and the landscape it produces. The issue of land use management practise will be the critical one for the Yorkshire Dales National Park. Along with other bodies we are currently involved in practices whereby farmers and land owners are encouraged (through agri-environment schemes) to conserve and enhance the existing natural environment. The integrity of the existing features of the landscape and natural environment would be a key factor in determining resilience to climate change. This may mean new land management practices may be required to plan for adaptation.

11. The National Park will undoubtedly be affected by climate change adaptation strategies which have been developed at international, national and regional level. However, these strategies will need to recognise local conditions and it is likely that more localised strategies will be required for particular areas.

12. Although the focus has been on the negative impact on climate change, the introduction of measures to both mitigate and adapt to its effect could, if developed sensitively, bring wider benefits for the National Park. For example, measures to increase energy efficiency will add to the quality of air and could save costs for individuals and businesses; development of wood fuel heating systems using local supply chains could create more value for local timber products and enhance local employment; the use of a landscape scale approach to adaptation of extreme weather events and flood alleviation is likely to create biodiversity benefits through habitat creation and increased habitat connectivity.

### General Principles

13. In putting together a suggested Authority approach, a number of general principles have been followed:

- Climate change is happening;
- Climate change is not an ‘environmental issue’ in the traditional sense. Its effects are likely to affect every aspect of the national park (its landscape, wildlife, economy, development, usage, historic environment etc) and almost every aspect of the Authority’s work. An effective Authority approach depends on the engagement of Members, staff and volunteers right across the organisation;

- The Authority's approach needs to be proportionate, cost effective (although the way we calculate 'costs' may need to change) and avoid our attempting to take on the responsibilities of other bodies;
- There is a lot of action already underway or planned for the coming year;
- Climate change is too big to be dealt with through a separate strategy. As it will affect everything, every strategy will need to take account of it.

## Policy Context

14. As mentioned earlier in the report, any action to tackle climate change in the park will only be effective if it sits within the framework that is set at international, national and regional level. Key national and regional documents include:

- **The UK Climate Change Programme** – published in 2006, which set out a range of measures to tackle climate change across all sectors of the economy;
- **Climate Change Bill** – draft currently out for consultation. The bill proposes binding legal commitments to reduce the UK's contribution to carbon dioxide emissions, through domestic and international action by 60% below 1990 levels by 2050, and by between 26% and 30% by 2020.
- **Yorkshire & Humber's Climate Change Action Plan** – published in 2005. This plan identifies the priorities for action in North Yorkshire as: designing solutions to localised flooding that prevent flash floods at source, whilst also enhancing the local environment; and ensuring that valuable natural environments are preserved and enhanced to protect important habitats and to ensure that the tourism potential of the region is not diminished.
- **Regional Spatial Strategy/Regional Economic Strategy** – all contain policies for the adaptation and mitigation of climate change. In particular, the regional development agency, proposes to be the first [through the revision of the Regional Economic Strategy] to ensure that climate change, its mitigation and adaptation, is a recurring theme in each approach to the sustainable economic development of the region. The National Park Authority is shortly to enter discussions with Yorkshire Forward on how we might best work together in order to deliver the objectives of both organisations whilst playing a greater role in dealing with the impact of climate change.

15. More specifically, in relation to national park authorities and local authorities:

- **ENPAA Position Statement on Climate Change** – commits national park authorities to become carbon neutral by 2012 (a challenging but necessary statement of national park authorities' intent) and sets a long-term aim of making the Parks themselves carbon neutral. A copy is at **Appendix 1**.
- **North Yorkshire Local Area Agreement** - along with other public sector bodies in North Yorkshire, the national park authority has signed up to reduce its greenhouse gas emissions by 5% by 2010 (not a challenging target for us!)
- **Nottingham Declaration on Climate Change** – this document, attached at **Appendix 2**, is a means by which many local Authorities have shown their commitment to tackling climate change. By signing, Authorities pledge to actively tackle climate change in their area and work with others to reduce emissions countrywide. Further information can be found at

- **ANPA Workshop 2007 on Climate Change** – this workshop identified a number of actions that National Park Authorities would consider, in their response to climate change. Dales National Park Authority members specifically identified the following:
  - A paper to the next Authority meeting to set the detail of NPA policy/targets.
  - Establish the carbon footprint of the NPA (and the Park), and develop a plan to meet the 2012 ‘carbon neutral’ target.
  - Continue programme of ‘green’ refurbishment of all NPA buildings.
  - Re-examine the current education programme.
  - Influence/work with key partners (e.g. local area agreement, Local strategic partnership, regional development agency etc)
  - Continue support for a biomass facilitation officer with targets for energy generation, woodland management and new woodland.
  - Consider the management of a ‘green community’ project
  - Consider enhancing the role of the sustainable development fund to deliver renewables targets (to be discussed with Yorkshire Forward).

### Framework for Action

16. The National Park Management Plan provides the framework for action in the Park over the next 5 years. As mentioned earlier in the paper, climate change is one of the cross cutting themes that underpins the plan. It contains a number of objectives that are explicitly linked to climate change and many more that will contribute directly or indirectly, to adaptation and mitigation. It is worth noting that in most cases these objectives will be delivering significant other benefits beyond their contribution to climate change targets. The authority should, therefore, focus its current efforts on ensuring that those existing objectives are delivered.

17. The attached appendices provide some details of the existing commitments in the National Park Management Plan, and our corporate commitments in relation to the Authority’s own environmental performance. In each case, a number of potential new actions are also identified. For ease of reference, the appendices have been split as follows:

- Appendix 3 - Adaptation (within the National Park)**
- Appendix 4 - Mitigation (within the National Park)**
- Appendix 5 - Mitigation (the Authority’s own operations)**

18. The majority of the NPMP objectives will be taken forward by the relevant officers as part of their day to day work. However, there are one or two areas of the additional activity that can only really be driven forward effectively through a more explicitly corporate approach. It is intended, therefore, to set up two cross Authority working groups to look at: (a) the carbon footprint of the park and the potential for achieving ENPAA’s long term aim of making the park carbon neutral; (b) the carbon footprint of the Authority, and ways in which the Authority could reduce its own CO<sub>2</sub> emissions in order to meet the ENPAA target of becoming carbon neutral by 2012.

19. The first of these comes under the remit of the Member Champion for the Natural Environment, the second, the Member Champion for Corporate Management.

### Next Steps

20. Subject to Members' views there are a number of things that the Authority can now do to raise the profile of climate change and make an explicit public statement of intent:

- (a) sign the Nottingham declaration on climate change;
- (b) pull together information on our existing activity to raise awareness of the work the Authority has already done (through e.g. 'The Visitor' and 'Dales' newspapers);
- (c) promote the additional activity that the Authority is now committing to through future press releases and other appropriate vehicles.

### Conclusion

21. Delivering the objectives set out in the National Park Management Plan will make a significant contribution to action on climate change. The Authority's primary role will be to work with its partners to ensure that those objectives and aims are achieved and are cost effective in a co-ordinated way. In addition, there will be a range of activities that the Authority should undertake itself, to reduce significantly its own carbon footprint and to act as an example to other bodies.

### RECOMMENDATION

22. That members:

- (a) note the particular likely impact of climate change on the park;
- (b) note the work already carried out, underway or planned by the Authority to tackle climate change;
- (c) approve the Authority signing up to the Nottingham Declaration on Climate Change.

**David Butterworth**  
**Chief Executive**

20 July 2007

Background documents: None

# ENPAA Position Statement

## Climate Change

Climate Change represents a serious threat and challenge to the special qualities of England's National Parks and their communities and our environment more generally. We believe urgent action is needed to reduce emissions, to adapt to those changes in our climate that are inevitable, and to raise awareness amongst residents, visitors and decision makers of the effects of climate change on these special areas. The National Park Authorities of England are committed to do their bit and becoming carbon neutral, as part of a wider co-ordinated response to climate change.

### England's National Parks

Our National Parks are a truly national treasure. The nine National Parks in England are managed by National Park Authorities. These are independent bodies, funded by central Government. National Parks have two purposes, to:

- conserve and enhance their natural beauty, wildlife and cultural heritage; and
- promote opportunities for the understanding and enjoyment of the special qualities of National Parks by the public.

In carrying out these purposes, they have a duty to seek to foster the economic and social well-being of local communities within the National Park.

### Climate Change and National Parks in England

While the climate is a dynamic system that changes over time, human influence is having a profound effect on the rate of change. There is considerable consensus that rising emissions of greenhouse gases are leading to significant unmanaged changes. Knowledge about what the precise effects will be is still growing. Indeed, managing the National Parks within an

environment of considerable uncertainty is likely to become the norm.

The effects on National Parks in England are likely to be varied and represent both threats and opportunities. More work needs to be done to identify these in more detail and the National Park Authorities (NPAs) support Natural England's strategic outcome to provide a 'secure environmental future'. Some effects are likely to include:

- increased risk of fire and erosion of sensitive habitats;
- coastal re-alignment caused by rising sea levels leading to inundation;
- increased flooding and erosion along coasts and river corridors;
- changes in patterns of tourism caused by changing temperature and rainfall;
- increased erosion to paths caused by changing visitor behaviour and environmental conditions;
- loss of inter-tidal habitats;
- threats to wildlife habitats and 'protected species' unable to adapt to the drier summers and changing climate;
- an increase in some species (like bracken) and decline in others including the potential for local extinctions;

- flooding, subsidence and erosion leading to structural damage of transport infrastructure, traditional buildings, and archaeological features;
- threats to traditional farming caused by altered growing conditions for crops and livestock;
- opportunities to grow new crops;
- increased pressure on water resources (especially from farming) from drier summers;
- greater abstraction of water leading to the effects of diffuse pollution on wildlife to be magnified; and
- changes to the distribution of different trees species that contribute to the landscape.

The effects of climate change will have a cumulative impact on the National Parks that will go beyond the isolated changes noted above.

The response to climate change must be carefully managed or the special qualities of the National Parks might be degraded from inside and beyond their boundaries. Examples include large scale wind developments, or inappropriate planting of forests to act as ‘carbon sinks’.

### **ENPAA’s Position**

The National Park Authorities are committed to doing their bit to tackle climate change. Protecting the special qualities of the National Parks from the effects of climate change and helping them to adapt (where possible) is a central element of fulfilling our statutory purposes, as is helping others to understand how they can help too.

Our collective aim is to move towards a situation where we have National Parks that are ‘Carbon Neutral’. As part of this aim, the National Park Authorities (in keeping with the rest of the Government estate) are committed to becoming carbon neutral by 2012.

The National Park Authorities already contribute to tackling climate change in a large number of ways.

### Working with land managers

National Park Authorities actively influence the management of 5% of England’s land area, and raise awareness of environmental, social and economic concerns threatening these fragile areas.

The NPAs help land managers to support the management of large carbon sinks. The peat contained within upland landscapes found in seven of England’s National Parks is huge. The Peak District, alone, holds 22 Mt C. If these peat uplands are eroded this will significantly undermine efforts elsewhere to reduce emissions of carbon dioxide. Good management of soils in all areas will also be important.

The National Park Authorities aim to support farming practices in upland and lowland landscapes that protect this resource and deliver many other benefits. A number are involved in projects to restore upland moorlands and lowland valley mires. They are also helping farmers to promote local food produced to high environmental standards, thereby reducing air miles.

We will also support appropriate woodland planting initiatives as part of landscape restoration schemes.

### Planning for a low carbon future

National Park Authorities are planning authorities, and through this role have been encouraging the use of small scale renewable energy schemes and sustainable transport that uses less energy. We support the energy hierarchy, of seeking to reduce energy consumption; improving energy efficiency; increasing the contribution of renewables; and making those fossil fuels that are burnt more efficient.

National Park Authorities will:

- actively support projects that promote energy conservation, energy efficiency, and small scale renewable projects that are both sympathetic in design and for local use;
- encourage planning to reduce carbon emissions through the orientation, design and location of new development;
- seek to reduce the need to travel and the use of more sustainable forms of transport, where possible; whilst also
- object vigorously to proposals that damage the special qualities of the National Parks.

#### Supporting local community action

Through the Sustainable Development Fund, the Authorities have been able to provide vital financial support to schemes that explore ways to reduce greenhouse gas emissions. We will support, where possible, community inspired schemes that achieve this, including through local Energy Saving Companies (ESCOs).

Moving to a low carbon economy brings with it opportunities. NPAs wish to support initiatives that deliver economic benefits to rural economies from low carbon practices or technology – providing they are consistent with protecting the qualities of the National Park.

It will be important for economic, social and environmental reasons to understand the interaction between visitor behaviour and environmental capacity with changing climatic conditions. NPAs will assess the effects of climate change on tourism in their area, and support green tourism practices that limit emissions or raise awareness of climate change.

#### Raising awareness on climate change

Over 75 million people visit England's National Parks every year. Through visitor

centres; Ranger guided walks, their websites and education centres; the Authorities are able to highlight key points about climate change to visitors. And through publications for local residents are able to reinforce these messages.

National Park Authorities will:

- continue to encourage the use of public transport by visitors and local communities;
- explain to visitors and residents how the National Park will be affected by climate change and what they can do to help; and
- support demonstration and research projects that assist with this task within their area.

#### National Park Management Plans

The National Park Management Plan will be a key mechanism for ensuring all those whose operations affect the National Park are committed to take action on climate change. We will, working with others:

- seek to obtain robust assessments of the effects of climate change on the special qualities of the National Parks;
- include information on climate change within State of the National Park Reports;
- adopt a risk management approach to the uncertainties of the future environment;
- include policies on climate change mitigation and adaptation in Management Plans when they come to be reviewed;
- assess the degree to which the current or draft Management Plan will deliver a carbon neutral National Park, and identify further measures that will assist in this aim; and
- report annually to Members of the National Park Authority on progress being made (with partners) to deliver reductions within the National Park.

### Demonstrating solutions

The English National Park Authorities believe they have a key role to play in demonstrating how through more sustainable lifestyles, it is possible to reduce carbon emissions.

A number of Authorities are using renewable energy to power their own buildings, or transport (eg. vehicles run on bio-fuels, or the 'Ra' England's first solar powered boat).

We will aim to reduce carbon emissions within the National Park Authorities by:

- reducing energy consumption;
- assessing the scope for reducing car mileage through the greater use of car sharing, car pools, public transport, and other alternatives like working arrangements; and
- improving the environmental performance of the vehicle fleet of the NPAs; and
- agreeing top level indicators that can be used across NPAs to monitor activity.

### Adapting to inevitable changes ahead

Changes will continue to occur because of the delayed effects of greenhouse gas emissions that have already been emitted into the atmosphere. NPAs have an important role in relation to adapting to this change and providing opportunities to ensure there are robust environmental ecosystems that are resilient to climate change. We will:

- assess what changes may be required in an uncertain future to protect the qualities of the National Park (from open landscapes to the historic environment) from the effects of climate change;
- adopt a landscape scale approach to managing wildlife that helps wildlife adapt, and minimises losses; and

- consider if measures are needed to support the social and economic well being of communities longer term from the effects of climate change, and to make the most of opportunities where they exist.

### Monitoring and review

ENPAA will review this Position Statement, and progress towards achieving it, on an annual basis.

### **Supporting action**

National Park Authorities are committed to doing their bit, but must be supported in the task. It is imperative that others with an opportunity to make a difference and sometimes greater resources do likewise.

We look to Government to:

- recognise the valuable contribution of National Parks in protecting large reservoirs of carbon;
- provide the significant funds required to help NPAs deliver on this agenda;
- publish a Policy Position Statement on Climate Change that reflects the potential for reducing energy demand and promotes micro-renewables without reducing the protection afforded to National Parks through planning; and
- support National Park Authorities with establishing the baseline data on carbon emissions and other information necessary to measure progress.

We also look to:

- the Regional Assemblies to support the National Park Authorities planning policies;
- Regional Spatial Strategies to seek to reverse the fragmentation of landscapes, and to restore and enhance the wider countryside in order to allow

- species to move in response to climate change;
- the Regional Development Agencies (RDAs) to assist the Authorities in assessing the needs of rural communities in terms of changing patterns of tourism, and the potential for low carbon economic developments;
  - the RDAs and Utilities to support work by NPAs in promoting small scale, community-owned renewables;
  - Natural England to work with NPAs on supporting land management techniques that protect carbon sinks, and adapt to a changing climate;
  - the tourism sector to engage with NPAs in promoting green tourism initiatives that reduce emissions and protect National Park qualities; and
  - all other bodies and local organisations whose work contribute to the implementation of National Park Management Plans to actively support this agenda.

The English National Park Authorities Association (ENPAA) provides a collective voice for the National Parks. This statement sets out their shared position on Climate Change. Each Authority works to implement the Management Plan for its area, and so each National Park Authority will need to implement this and other policies in ways that are compatible with this plan and appropriate to local circumstance.

*ENPAA*

*English National Park Authorities Association*

*Address: 1<sup>st</sup> Floor, 2-4 Great Eastern Street, London EC2A 3NW*

*Tel: 020 7655 4812*

*Email: [enquiries@enpaa.org.uk](mailto:enquiries@enpaa.org.uk)*

*Web: [www.nationalparks.gov.uk](http://www.nationalparks.gov.uk)*

November 2006

# The Nottingham Declaration on Climate Change

## We acknowledge that

- Evidence shows that climate change is occurring.
- Climate change will continue to have far reaching effects on the UK's people and places, economy, society and environment.

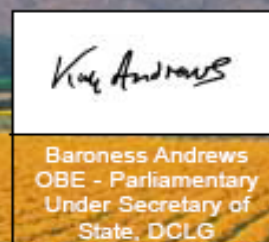
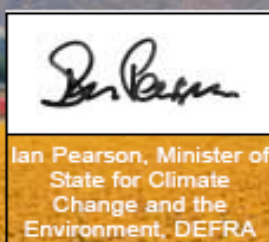
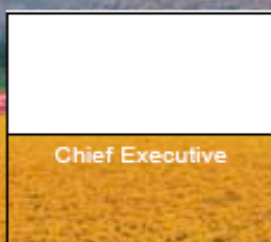
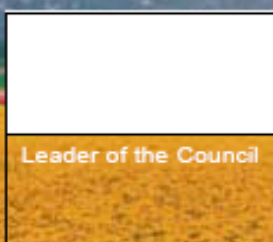
## We welcome the

- Social, economic and environmental benefits which come from combating climate change.
- Emissions targets agreed by central government and the programme for delivering change, as set out in the UK Climate Change Programme.
- Opportunity for local government to lead the response at a local level, encouraging and helping local residents, local businesses and other organisations - to reduce their energy costs, to reduce congestion, to adapt to the impacts of climate change, to improve the local environment and to deal with fuel poverty in our communities.
- Endorsement of this declaration by central government.

## We commit our Council from this date \_\_\_\_\_ to

- Work with central government to contribute, at a local level, to the delivery of the UK Climate Change Programme, the Kyoto Protocol and the target for carbon dioxide reduction by 2010.
- Participate in local and regional networks for support.
- Within the next two years develop plans with our partners and local communities to progressively address the causes and the impacts of climate change, according to our local priorities, securing maximum benefit for our communities.
- Publicly declare, within appropriate plans and strategies, the commitment to achieve a significant reduction of greenhouse gas emissions from our own authority's operations, especially energy sourcing and use, travel and transport, waste production and disposal and the purchasing of goods and services.
- Assess the risk associated with climate change and the implications for our services and our communities of climate change impacts and adapt accordingly.
- Encourage all sectors in our local community to take the opportunity to adapt to the impacts of climate change, to reduce their own greenhouse gas emissions and to make public their commitment to action.
- Monitor the progress of our plans against the actions needed and publish the result.

\_\_\_\_\_ Council  
acknowledges the increasing impact that climate change will have on our community during the 21st century and commits to tackling the causes and effects of a changing climate on our city/county/borough/district.



NDCG Revised Version 5/8/2008

## ADAPTATION

### Current commitments

There are two explicit objectives in the National Park Management Plan relating to adaptation to climate change:

- NC1. By 2009, assess the most likely impacts of climate change on the National Park over the next 15 years, and use this to produce an adaptation plan for managing those impacts.
- NC2. By 2008, identify and map areas where less intensive management could be trialled or which could provide natural connections between existing habitat fragments to allow habitats and species to respond to environmental change.

However, there are a number of others that will also have a direct impact. These include: re-introduction of species (NC9); control of invasive species and pests (NC10); reducing flood risk, soil erosion etc (L9); increasing the area of BAP habitats (NC4); diversifying the local economy (EE2).

### Further action needed

#### 1. **Impact assessment**

The National Park objective NC1 is focused on the nature conservation impacts of climate change. This needs to be expanded to consider the potential impacts on other areas of the Authority's work, and to identify those where 'adaptation' action and new policies will be needed (and, conversely, those where adaptation is impossible).

## MITIGATION (PARK)

### Current commitments

As part of ENPAA, we are committed to a collective aim to “move towards a situation where we have National Parks that are carbon neutral”.

There are only two objectives in the National Park Management Plan that are explicitly about mitigating climate change impacts:

- L10. Support and encourage small-scale renewable energy developments, such as local hydro-electric generation, small-scale wind turbines, and wood-fuelled heating systems linked to managed woodland, that meet local needs and do not adversely affect the distinctive character of the Yorkshire Dales’ landscape.
- CC8. By 2011 develop and implement a programme to raise awareness of wider environmental issues, such as resource depletion, climate change and waste management.

However, there are many others that would directly contribute to mitigating the effects of climate change. For example, objectives relating to developing community transport (CC2); walking and cycling (CC3); community ‘green projects’ (CC9); sustainable development fund (CC10); sustainable transport modes (AR6); sustainable tourism and other businesses (UE10 and EE7); restoring blanket bog and creating new woodlands (NC4); sustainable building design (HE8); and buying and sourcing local food (EE9).

### Further action needed

1. **Measure the ‘carbon footprint’ for the Park**  
Our long-term aspiration is a carbon-neutral Park but we don’t know what the current level of emissions is. Nor do we have any information on the main sources of emissions. This gap needs to be filled urgently before the necessary action and policy changes can be developed.
2. **Renewable energy**  
The Authority is already supporting renewable energy projects through SDF and a biomass ‘facilitation’ project. These could be developed further but will require a much clearer ‘steer’ through the planning system:
  - a) produce advice document on use of renewables in the Park;
  - b) ensure LDF facilitates and actively promotes appropriate renewable energy in new development;
  - c) develop officers able to provide specialist advice on renewables;
  - d) ‘ring fence’ SDF money for renewables projects and seek external funding;
  - e) pilot development of renewables with one local community.

3. **Carbon sinks**  
Need to develop external funding for projects to restore blanket bog and create new woodlands (beyond 2007).
4. **Lobbying**  
Many of the relevant NPMP objectives are dependent on the action of other bodies. It will be vital that relevant officers take every opportunity to press partners to deliver on commitments.
5. **Raising awareness**  
As 95% of the Park is in private ownership, making it carbon neutral depends very much on individuals and businesses taking action. We will need to work out what the Authority's role should be, and how we can best complement the work of the national, regional and local bodies with climate change responsibilities.

## MITIGATION (AUTHORITY)

### Current commitments

As part of the North Yorkshire Local Area Agreement, the Authority is committed to reducing CO<sub>2</sub> emissions from our buildings by 5% by 2010.

As part of ENPAA, the Authority has signed up to a commitment to becoming 'carbon neutral' by 2012.

### Action needed

1. **Carry out a proper audit of the Authority's 'carbon footprint'.**  
The key issue at this stage is that we don't know what our overall carbon footprint actually is (although we do have data for our buildings). As a result, we don't yet know the scale of the activity we need to undertake to achieve our targets.
2. **Identify options for action to reduce and/or offset our CO<sub>2</sub> emissions.**  
Once we know what our 'footprint' is, we will need to work out the action necessary to become carbon neutral. There are a number of obvious options that might be considered:
  - a) changing the vehicle fleet;
  - b) reducing vehicle usage;
  - c) improving energy efficiency of buildings;
  - d) introducing renewable energy sources;
  - e) reducing energy use in offices etc
3. **Go public**  
Part of the value in the Authority taking action is to raise awareness of climate change amongst the public and other bodies. The Authority should look to be an example to others of what can be achieved. To that end, the Authority should engage in a programme of awareness raising, which might include:
  - a) signing up to the Nottingham Declaration on Climate Change;
  - b) media releases on specific YDNPA action;
  - c) working with district and county councils on e.g. climate change 'roadshows' within the Park