

The Natural Environment

Consultation Paper 90

Introduction

The health of the natural environment is critical to the long-term future of the planet and to the quality of life of people today.

The condition of the local environment has been shown to have a direct effect both on the ability of people to enjoy the places where they live, work and spend their leisure time and on their mental and physical health. For example, the National Institute for Clinical Excellence has recently called for the physical environment in urban areas to be improved to encourage people to take more exercise, after finding evidence that increasing physical activity levels can help to prevent or manage more than 20 conditions and diseases.

The health of the planet depends on balanced ecosystems that enable the sustainable production of energy, food, timber and other resources and that process pollution and waste to provide clean water and air and fertile soils. Humanity must live within the environmental capacity of the planet or face long-term disaster.

It is therefore of considerable concern that, on almost any measure, the trends both locally and globally are bleak. In the UK, the local environment is being damaged by:

- A degradation of the landscape
- The reduction in urban open spaces
- Diminishing tranquillity through light and noise pollution
- A loss of wildlife and their habitats

The environmental services delivered through the natural environment are being overloaded: we are exceeding the Earth's regenerative capacity by a third; if everyone in the world adopted an average UK lifestyle, we would exceed that capacity threefold. In particular:

- Some key resources are being consumed so fast that, at current rates, they will be exhausted in the foreseeable future
- The rate of loss of biodiversity is increasing so fast that scientists are forecasting a massive wave of extinctions that threatens human well-being as well as destroying habitats and species that are of value in themselves and whose significance may not yet be understood
- Clean water is an increasingly scarce resource throughout the world - including parts of the UK - and water pollution of both inland and marine environments continues

Climate change is aggravating almost all of these problems; however, as the Party has already looked extensively at issues surrounding Climate Change in Policy Paper 82 *Zero Carbon Britain*, this paper will not be dealing with these issues.

Concern for the natural environment is one of the founding principles of the Liberal Democrat Party: the Preamble to the Party's Constitution states that 'We believe that each generation is responsible for the fate of our planet and, by safeguarding the balance of nature and the environment, for the long term continuity of life in all its forms'.

This is no token belief: Liberal Democrats have been at the forefront of the fight to protect our environment locally, nationally and globally. In the last few years, we have adopted policies that include ensuring that the World Trade Organisation respects environmental principles; providing fiscal and other incentives to encourage the efficient use of resources; calling for an

Environmental Responsibility Act; setting a target of zero waste by 2020 for all municipal waste; adopting policies to better protect species, habitats and green spaces, and so on.

But we recognise that the scale and changing nature of the challenge requires fresh thinking and new and extended policy initiatives. We also recognise that the natural environment is extremely complex and that actions can have unexpected consequences (as demonstrated recently by policies to encourage the production of biofuels). We spell out below some key areas that we believe need attention but highlight here two options that could provide an overriding framework for our policies:

- 1. *Should the UK adopt a long-term target for protecting the natural environment through the introduction of a Parliamentary Bill setting legally binding targets paralleling those in the Climate Change Act, with an independent expert committee setting and monitoring the targets? If so, should this, from the start, set targets to achieve 'One Planet Living' or should it initially be a Resource Reduction Bill (on the basis that resource targets could be relatively easily measured and that this would lead on to full One Planet Living targets)?***
- 2. *How can a meaningful economic value be put on environmental resources to facilitate sensible policy decisions?***

The efficient use of resources

Poor resource management leads to a waste of materials, energy and water and causes unnecessary environmental damage, including climate change. The UK discarded around 272 million tonnes of materials as waste in 2007, the majority coming from the demolition, construction, commercial and industrial sectors.

Resource efficiency policies should be based on an industrial ecology approach that looks at the flows of energy, water and materials through the economy and involves product design, the processes used in manufacture and energy use. The aim should be to minimise the amount of raw materials used and, at the end of the process, to reabsorb remaining materials into the economy or return them safely to the natural ecosystem.

In business, a responsible attitude to resource use should be encouraged. Competition for, and therefore the costs of, raw materials and energy are increasing and have become a factor to consider in the operational risk management of all businesses. Some senior business leaders have recognised the need to address the consumption of resources but smaller businesses, in particular, are hindered by a lack of convenient services, systems and information. Until recently, advice and support has been delivered through local authorities, Business Link, and the Defra Business Resource Efficiency and Waste (BREW) programme, but the ending of the BREW programme and accompanying funding cuts have damaged the level of support and advice available.

Waste management, resource efficiency and energy management need to be better integrated. Waste food, for example, can be utilised through systems such as anaerobic digestion to provide a decentralised source of energy and fuel.

Water is another specific resource issue that needs to be considered in view of the likely effects of climate change and the huge housing growth expected in some of the most water-stressed parts of the UK. The supply side can be tackled through large or small-scale water transfers or the construction of reservoirs while demand can be reduced through a combination of the incentive provided by metering and the use of water-saving products.

There is a need to recognise the complexity of interactions between resource choices and the

effects on the environment. One current issue is the effect on rainforests and food production and prices of the rapid push to mitigate the climate change emissions of transport through the use of biofuels. Biofuels - especially those produced from waste or from such new sources as algae - can be almost entirely beneficial but we need to assess if unacceptable damage is being caused by some current practices.

Issues to consider:

- 3. *Would the introduction of a comprehensive system of environmental accounting that assigned a value to environmental impacts provide a useful guide to policy and give a much clearer message to business about what is acceptable?***
- 4. *What support would best help businesses become resource efficient?***
- 5. *Should the 'Merton Rule' that insists on a proportion of the energy used in a new building be provided from on-site renewable sources be extended to promote decentralised energy based on organic wastes?***
- 6. *Should the zero waste target be extended beyond municipal waste; if so, what should it cover?***
- 7. *How can we best move towards sustainable production?***
- 8. *What encouragement and support should be provided for the design and development of low-resource products and services?***
- 9. *What measures are needed to improve water efficiency and cut leakage?***
- 10. *Should water meters be mandatory in water-stressed areas? If so, how should low income families be protected? Are there better ways to encourage domestic water efficiency?***
- 11. *Would the introduction of tight sustainability standards for biofuels prevent damaging consequences from their use or should biofuel use be curbed?***

Biodiversity

'Human activities have taken the planet to the edge of a massive wave of species extinctions, further threatening our own well-being'. That was the verdict of the Millennium Assessment published by the United Nations in 2003 to parallel the work of the IPCC on climate change. Despite the fact that the scientists responsible for the Assessment believe that the loss of biodiversity is as big a long-term risk to human welfare as is climate change, politicians have generally given the issue little priority.

This is nothing new. In 1993, the Convention on Biological Diversity agreed at the Rio Earth Summit came into force: its key target was 'to achieve by 2010 a significant reduction of the current rate of biodiversity loss at the global, regional and national level'. Yet the latest Red List of endangered species published by the World Conservation Union in 2007 listed some 16,000 species as vulnerable, endangered or critically endangered. The EU and UK continue to be a market for wildlife products from third countries.

The UK has lost more than 100 species in the last century and the rate of loss is increasing. Of particular concern is the marine environment: WWF's Marine Health Check in 2005 reported that, of 16 key marine species and habitats, all but two were in decline in UK waters. Globally, large-scale disruptive fishing methods that pay no regard to conservation threaten the future of fish stocks and endanger the whole ecology of the marine environment, an environment rich in biodiversity which plays a key role in maintaining the ecological balance of the planet.

Biodiversity is what makes the Earth what it is. The loss of biodiversity endangers our future in many ways, including:

- It directly affects our food supplies through, for example, the loss of fisheries, and reduces

the genetic pool available for new pest, disease and drought resistant crops

- It removes potentially valuable species that may be used to develop drugs, materials and other resources
- It weakens the natural systems on which we rely to clean our air and water and keep our soils fertile

Issues to consider:

12. How can individuals, communities and businesses be encouraged to value and enhance habitats and biodiversity?

13. Globally, how can local communities be rewarded for managing their biodiversity resources sustainably?

14. What further protection is needed for species and habitats in the UK?

15. What policies are needed to ensure a national 'green grid' of effective wildlife corridors?

16. Should the UK and EU insist on proof that imported goods come only from sources that do not damage biodiversity?

17. Is there a role for GM technologies, if properly regulated, in providing the food and other resources required by the rapidly growing world population?

18. What national and international measures are needed to protect the marine environment?

Protecting the natural environment

The natural environment is being degraded in many ways. Rural tranquillity is becoming increasingly difficult to find and the facility for the natural landscape to provide restorative leisure for people is being diminished. Urban open spaces are being lost or damaged. Noise and light pollution are getting worse and, in some areas, transport and other emissions are a hazard to health. Soil fertility and its ability to capture and store carbon are being lost. The marine environment is being damaged by aggregate extraction, inappropriate fishing methods, and rubbish dumped at sea.

The land use planning system provides one key to protecting the environment. However, it currently operates without any clear context for the overall effect of decisions on the natural environment. Basing substantive spatial decisions for development on the environmental capacity of the competing sites could greatly enhance the ability to protect environmental resources. However, a lack of data - especially in commercial waste and biodiversity - currently inhibits informed decision making.

With the introduction of the draft Marine Bill, the government is at last recognising the need for action in this area. While the proposal to set up a Marine Management Organisation (MMO) and enable the designation of Marine Conservation Zones are welcome, there is no provision for coastal communities to play a role within the MMO and no clarity about how the extent of the conservation zones is to be designated or timescales for action.

Soil quality is essential to conserve biodiversity and ensure sustainable agriculture and forestry and healthy urban green spaces. In 2004, Defra produced the first Soil Action Plan for England. Although weak in certain key areas, implementing the Plan would begin to provide the framework necessary to protect soil quality. An alternative approach is the use of voluntary land care partnerships between farmers, local authorities, government agencies and advisers; however, concern has been expressed by the Parliamentary Office of Science and Technology that these lack the necessary rigour to address the fundamental causes of long-term soil

degradation and inappropriate land use.

There is also a need for action to urgently reverse the destruction of the world's rainforests, which is being driven by the global market for timber, meat and biofuels. The damage is immense, for the rainforests are home to the world's richest biodiversity, as well as being a significant carbon sink. Controlling the demands that lead to rainforest destruction and rewarding local people for conserving their environments require international action.

Air quality in the UK has improved but there are still pollution hotspots, generally in heavily-trafficked urban areas. The headline measures to tackle these have been congestion charge areas and low emission zones (LEZs). However, LEZs only deliver substantial emission reductions if they are tough enough. There are other ways to reduce air pollution such as switching off bus and train engines when in a terminus and minimising on-ground emissions from aircraft by towing them to the runway threshold and only then starting the engines.

Emissions from shipping also need to be tightened. Shipping emissions are having a major effect on some coastal and port areas. Although the English Channel and the North Sea are now Sulphur Oxide Emission Control Areas, shipping in these areas can still use fuel with 1.5% sulphur content, compared with just 50ppm allowed for land-based transport. Shipping could be forced to switch to lower-sulphur fuels and, when in port, to plug into on-shore electricity supplies.

Flooding is an issue both inland and on the coast. The frequency and severity of flash floods is likely to increase. Hard defences that try to drain water away are likely to be overwhelmed and there is a need to switch back to using the natural environment to absorb stormwater and then allow it to flow away slowly. This means that flood plains and wetlands must be protected and, in some cases, reinstated. Sustainable urban drainage systems must become the norm for new developments and, where possible, be retrofitted in vulnerable areas.

There is a widespread recognition that hard sea defences are not sustainable around our entire coastline. However, the current approach of allowing defences in many areas to decay can lead to a disproportionate impact on undefended areas and great unfairness to those who lose homes or land. Without any scheme of compensation when homes are lost, blight can set in as soon as decisions are made – even if the threat is years away. We need to ensure there is confidence to invest in these communities.

Evidence from Norfolk suggests that the scale of the losses when land and buildings are abandoned to the sea is currently underestimated; we must urgently review the cost benefit analysis. It is essential that public policy accepts the need for social justice when developing a strategy for the coast - it is unacceptable that those on the front line of the impact of climate change carry the entire burden.

Planning policies also need to concentrate more on enabling people to live with higher summer temperatures. Building regulations and planning policies must ensure that buildings have sufficient thermal mass, shading, and natural ventilation to keep them cool during the day.

Issues to consider:

19. How do we balance the competing needs for protected green space and affordable housing, particularly in the South East of England?

20. Does the current system of landscape and biodiversity protection provided through

SSSIs, AONBs, etc need strengthening?

- 21. How can we ensure we protect valuable green spaces within urban environments, currently classified as 'brownfield'?***
- 22. How can the MMO be made a democratically-accountable body?***
- 23. What policies are needed to ensure that the Marine Protection Zones provide genuine protection as soon as possible?***
- 24. Should the protection of soil quality be left to voluntary action or be subject to regulation?***
- 25. What action should be taken internationally to prevent major deforestation?***
- 26. Should pollution controls/standards be extended to include such products as mowers, farm machinery and construction equipment?***
- 27. Should EU legislation be tightened to reduce emissions from shipping?***
- 28. What changes to national planning policies are required to minimise inland flooding?***
- 29. How can we compensate those suffering economic loss from flood management measures?***
- 30. What changes are needed to the building regulations and/or planning policies in response to higher summer temperatures?***

Making the best of the natural environment

As described in the opening paragraphs of this paper, there is a growing recognition of the value of the natural environment in contributing to the physical and mental well-being of people. This makes it imperative for everyone to have everyday access to quality green spaces. Unfortunately, the pressure for development is damaging that aspiration. There is therefore a need to consider new measures to protect and promote green spaces and access.

Issues to consider:

- 31. What further measures are needed to protect and enhance urban green spaces, including parks and allotments?***
- 32. How can local people be more involved in managing open spaces?***
- 33. Should domestic gardens no longer be classified as brownfield and instead be considered for development on a case-by-case basis?***
- 34. Should more small-scale development be encouraged on suitable rural sites?***
- 35. What quality of life indicators are needed to measure the success of policies to protect the natural environment?***

Glossary

AONB - An Area of Outstanding Natural Beauty. There are 40 AONBs in England and Wales and each has been designated for special attention by reason of their high qualities, including flora, fauna, historical and cultural associations as well as scenic views.

BERR – Government Department for Business Enterprise and Regulatory Reform.

Biofuels - A fuel or energy produced from dry organic matter or combustible oils produced by plants.

BREW - Business Resource Efficiency & Waste Programme. Provides advice and support for business. Part of DEFRA.

Brownfield – Also known as "previously developed land" (PDL). Such land is usually vacant, derelict or underused.

Business Link – Part of BERR. Provides advice on how to start, run or grow a business.

Congestion charge areas - An area where drivers are charged for travelling to discourage use of busy roads at peak times.

DEFRA – Government Department for Environment, Food and Rural Affairs.

Ecosystem - A natural unit to describe all living and non-living things in a area working together.

LEZ - A Low Emission Zone. This an area where access by certain polluting vehicles is restricted.

MMO – The Government's proposed Marine Management Organisation. This would be a centre of marine expertise, provide a consistent and unified approach, deliver improved coordination of information and data and reduce administrative burdens.

Municipal waste – Waste collected by local authorities, predominantly domestic.

SSSI – Site of Special Scientific Interest.

World Trade Organisation - Deals with the rules of trade between nations at a global level.

Zero Waste target – Liberal Democrat policy for zero municipal waste by 2020 (*Zero Waste Motion, Federal Conference September 2003*).