EEAC

Network of
European Environment and Sustainable
Development Advisory Councils

STATEMENT

September 2005

BIODIVERSITY CONSERVATION AND ADAPTATION TO THE IMPACTS OF CLIMATE CHANGE

EEAC Statement

This statement is supported by the following EEAC Councils:

Austria	Austrian Association for Agriculture Research (OeVAF)
	Forum for Sustainable Development
Belgium	Environment and Nature Council of Flanders (MiNa-Raad)[1]
Finland	Finnish Council for Natural Resources (FCNR)
Germany	Advisory Council on the Environment (SRU)
	Council for Landstewardship (DRL)
Hungary	National Council on the Environment (OKT)
Ireland	Comhar - The National Sustainable Development Partnership
	The Heritage Council
Netherlands	Council for the Rural Area (RLG)
Poland	State Environmental Council of Poland (PROS)[2]
Portugal	National Council on Environment and Sustainable Development (CNADS)
Slovenia	Council for Environmental Protection (CEPRS)
Spain	Advisory Council for the Sustainable Development of Catalonia (CADS)
Sweden	Environment Advisory Council (MVB): Working Group on Sustainable Use and Conservation of Natural Resources
United Kingdom	Royal Commission on Environmental Pollution (RCEP)
	Countryside Council for Wales (CCW)
	English Nature (EN)
	Joint Nature Conservation Committee (JNCC)
	Scottish Natural Heritage (SNH)
	Sustainable Development Commission (SDC)

[1] *Two organisations represented in the council abstain*

[2] *The PROS supports the statement, but cannot endorse targets for greenhouse gas emissions.*

Summary

Biodiversity loss is being exacerbated by climate change and this is hindering the European Union commitment to achieving the Gothenburg target of halting the loss of biodiversity by 2010. Whilst mitigation measures to reduce greenhouse gas emissions are essential, adaptation measures are also required to minimise the risk of loss of plant and animal species. Synergies should also be developed between biodiversity conservation and adaptation and mitigation policies in other key sectors.

Introduction

Biodiversity underpins the goods and services provided by ecosystems that are crucial to human well-being and survival. Ecosystem goods and services have significant economic value, even if some of these goods and most of these services are not traded in the market and carry no price tags. Their value arises from direct uses (eg in foods, medicines, biological control, industrial raw materials, leisure and tourism) and indirect uses from the services provided by biodiversity (eg photosynthesis, atmospheric, climatic and hydrological regulation, nutrient cycling, pest control, pollination and soil formation and maintenance).

Biodiversity also has a variety of other non-use values. These include intrinsic value (inherent worth) and bequest value (value to future generations).

There is broad scientific and political consensus that we have entered a period of unprecedented climate change driven largely by greenhouse gas emissions from human activities and that climate change is one of the most significant environmental threats to face the modern world, with some communities and environments being especially vulnerable[1]. Global temperatures will continue to rise during the first half of the 21st Century due to greenhouse gases already in the atmosphere, and emissions today and in years to come will contribute to the amount of climate change in the latter half of the Century.

It is vital that we mitigate now against longer term climate change. Warming in excess of 2 degrees C would increase the risk of substantial ecological disruption and social disaster to unacceptably high levels[1]. Even at this threshold, losses of biodiversity and biological resources of value in carbon sequestration will occur.

Substantial cuts in greenhouse gas emissions are clearly required. The Kyoto Protocol is an important first step in raising the profile of climate change as a major environmental issue and of the need to reduce emissions, but additional measures will be essential to effectively stabilise climate.

Analyses of global economic trends suggest that mitigation is likely to be feasible at acceptable cost, especially in view of the predicted damage from climate change. Considering the 2 degrees C temperature threshold and the global responsibility of the European Union, the EEAC Energy Working Group has recommended that the European Union should commit to greenhouse gas reduction targets of at least 30% below 1990 levels by 2020 and 70% by 2050[2]. Mitigation activities may have positive or negative impacts on biodiversity and these will require careful assessment.

As we will be subject to at least 50 years of climate change which we cannot prevent, we will have to adapt to its unavoidable impacts. Adaptation is concerned with reducing the vulnerability of human and natural systems to climate change. In biodiversity conservation, this should complement other activities to reduce pressures arising from, for example, habitat fragmentation, land use change, over-harvesting, pollution, urban expansion and invasions of alien species. The 'precautionary principle' should be a key consideration in this context. Activities that promote adaptation of biodiversity to climate change can also contribute to its conservation and sustainable use and to sustainable land management, and vice versa. Conservation of biodiversity and maintenance of ecosystem structure and function can contribute to climate adaptation strategies by maintaining ecosystem resilience and thereby minimising vulnerability to climate change[3].

European Union Biodiversity Policy

The EEAC, at its annual conference in Oxford, England, 7-10 September 2005, wishes to:

1. Reiterate the importance of halting the loss of biodiversity across the European Union by 2010 (Gothenburg Target) and emphasise the need for action at all levels (including regional and local actors in Member States);

2. Emphasise the importance of policy integration in key sectors, especially agriculture, forestry, fisheries, water, transport, energy, built development, rural development, economic policy, trade, human health, and regional and spatial planning, to achieve sustainable use of natural resources and reduce pressures on biodiversity (Malahide Message[4]);

3. Emphasise that implementation of the European Union Biodiversity Strategy and Biodiversity Action Plans (that result from Convention on Biological Diversity) is essential and needs intensification;

4. Call for continued development of the Natura 2000 network on land and at sea and for implementation of sustainable management, both within and outside

protected areas (Habitats and Birds Directives; Water Framework Directive; Convention on Biological Diversity);

5. Draw attention to the importance of extending conservation planning across whole landscapes, halting net loss of habitat, enhancing ecological connectivity to reduce fragmentation and recreating ecosystems on a large scale (Pan-European Biological and Landscape Diversity Strategy; Article 10, Habitats Directive);

6. Support the establishment of a coherent network of Marine Protected Areas (Johannesburg Commitment) and take due account of biodiversity in coastal zone and marine management[5];

7. Support the climate change objective in the Malahide Message (Objective 4), particularly the need to achieve ecological connectivity of the Natura 2000 network and promote cross-border ecological corridors with neighbouring states (4.3) and to assess habitats and species most at risk and prepare and implement management plans (4.4), taking account of the diverse geographical range of projected impacts on Europe's biodiversity (eg Arctic, boreal, temperate, Mediterranean, montane, island);

8. Recognise the need for resilient ecological systems (terrestrial, freshwater, coastal and marine) with high-quality genetic diversity, which will buffer perturbations and accommodate, or adapt to, change and to work to achieve this through application of the ecosystem approach (Decision VII/11 adopted by the 7th Conference of the Parties to the Convention on Biological Diversity 2004).

Adaptation of Biodiversity Conservation to Climate Change

Furthermore, the EEAC:

9. Affirms the importance of assessing the observed and projected impacts of climate change on biodiversity within the context of the dynamism and functionality of ecosystems, of distinguishing between natural ecological succession and functional processes and climate-driven changes, and of adapting targets and establishing biodiversity indicators to help shape policies for biodiversity and integrate biodiversity needs into other policies (for example, the European Union structural indicators should include biodiversity indicators)[6,7];

10. Affirms the benefits of early action to build resilience and help ecosystems adapt sustainably to climate change (this may have the added advantage of being more cost effective)[6,7];

11. Recognises the need to strengthen partnerships and capacities (governments, management agencies, practitioners and other stakeholders including scientists) for addressing climate change and adapting conservation of biodiversity to its impacts[6,7];

12. Recognises the need to identify best practice and communicate advice and guidance on anticipating the impacts of climate change and formulating sustainable options for adapting land and water management to these changes[6,7];

13. Recommends that the Commission and Council of the European Union:
    (a) affirms the importance of adaptation within its climate change policy;
    (b) establishes a framework whereby European Union policies embed an obligation to integrate adaptation to climate change into Member State policies and plans for land and water management so that biodiversity and ecosystem resilience are sustained;
    (c) encourages regional and national climate change adaptation strategies that address the needs of biodiversity (as recommended by the European Environment Agency[8]);
    (d) assesses the need for a Europe-wide adaptation strategy for biodiversity that would facilitate, through the Convention on Biological Diversity, incorporation of climate change adaptation into National Biodiversity Strategies;
    (e) includes provisions for adaptation of biodiversity in policy reviews, including the Biodiversity Strategy, Thematic Strategies and European Union Sustainable Development Strategy, to allow for implementation of Objective 4 of the Malahide Message;
    (f) reinforces the implementation of the Habitats Directive, the Birds Directive and the Water Framework Directive to accommodate the impacts of climate change, emphasising:
        (i) the importance of ecological coherence within the Natura 2000 network and the need for connectivity between sites;
        (ii) the need to accommodate changing species compositions, including migratory species, within sites and recognise the implications for Favourable Conservation Status;
        (iii) the need for policies on the spread of non-native species into the Natura 2000 network as climate changes;
    (g) funds integrated research to help prioritise policy reforms that will result in benefits for biodiversity

conservation and climate change adaptation and mitigation, including a long term monitoring programme (with a comprehensive network of sites and species across Member States) to inform and test the effectiveness of policy measures adopted;

(h) requires that climate mitigation projects and measures proposed by Member States are assessed for their effects on biodiversity and that support is withheld from those which are potentially damaging;

(i) assembles a package of instruments, including investments, to ensure delivery of these recommendations;

14. Calls upon Members States to:

(a) develop, implement and monitor national biodiversity strategies and integrate action into other relevant sectoral policies;

(b) adjust their conservation policies, plans and actions in light of observed and projected impacts of climate change;

(c) include measures to increase ecological connectivity and reduce fragmentation in their land use planning;

(d) incorporate biodiversity conservation concerns in their climate change adaptation policies, sectoral policies and sustainable development strategies;

(e) ensure that adaptation and mitigation measures have no negative impacts on biodiversity and, where possible, provide positive benefits by recreating or restoring damaged ecosystems;

(f) support research into the impacts of climate change on biodiversity and use the results to inform policy;

15. Recommends the establishment of a task force that is mandated to:

(a) gather information on existing policies, plans and actions of European Union governments and their agencies to adapt biodiversity conservation to climate change;

(b) review existing measures and consider new approaches to adapting to climate change;

(c) act as an "advisory panel" on the revision of policies and the development of adaptation measures for biodiversity at the European level;

(d) develop guidance on conservation best practice in relation to climate change;

(e) disseminate and promote guidance;

(f) report annually on progress.

References

1. *Climate Change 2001.* Intergovernmental Panel on Climate Change, 2001. www.ipcc.ch

2. *70/30 Towards European Targets for Greenhouse Gas Reduction 2050 and 2020.* Statement of the EEAC Energy Working Group, 2004. www.eeac-net.org

3. *Interlinkages between Biological Diversity and Climate Change.* CBD Technical Series No 10, 2003. www.biodiv.org

4. Duke, G. (ed.) 2005. *Biodiversity and the EU - Sustaining Life, Sustaining Livelihoods.* Conference Report. Stakeholder Conference held under the Irish presidency of the European Union in partnership with the European Commission, 25th-27th May 2004, Grand Hotel, Malahide, Ireland. Department of the Environment, Heritage and Local Government, Ireland. Pages 132-183. http://biodiversity-chm.eea.eu.int/convention/cbd_ec/F1067953781

5. *Towards a European Marine Strategy.* Statement of EEAC Marine Working Group, 2004. www.eeac-net.org

6. Recommendation Vth IUCN World Parks Congress 05 (*Climate Change and Protected Areas*) noted by the Vth IUCN World Parks Congress (Durban, South Africa, 2003). www.iucn.org

7. Resolution 042 (*Adaptation to Climate Change: a Framework for Conservation Action*) adopted by the 3rd IUCN World Conservation Congress (Bangkok, Thailand, 2004). www.iucn.org

8. *Impacts of Europe's Changing Climate.* EEA Report No 2, 2004. http://reports.eea.eu.int/climate_report_2_2004/en

EEAC office, c/o MiNa-Raad, Kliniekstraat 25, 4th floor
B - 1070 Brussels, Belgium
Tel. +32 2 558 01 51 - Fax +32 2 558 01 31
E-mail info@eeac-net.org - Web www.eeac-net.org