



INSTITUTE of ECOLOGY and ENVIRONMENTAL MANAGEMENT

Position Statement – Climate Change

Summary

- IEEM recognises that climate change, due to the activities of mankind, is a major challenge that directly impacts on the environment, including biological diversity.
- Climate change is happening here and now, and requires immediate action – to mitigate against its causes and to adapt to the inevitable consequences.
- Mitigation requires current and future developments to be more sustainable – conservation of biodiversity is an important aspect of sustainable development. Adaptation opportunities should be provided to facilitate changes in patterns of biodiversity, (e.g. porosity at a landscape scale).
- IEEM is resolved to tackle this challenge and provide guidance on ecology and environmental management to practitioners and policy-makers.

Ecological Impacts of Climate Change in the UK and Ireland

The UK and Irish environment is changing and will continue to change. IEEM acknowledges that there are and will be huge social and economic consequences of climate change but its particular area of expertise is biodiversity conservation and enhancement – though wherever possible it will collaborate with others. Examples of the potential ecological consequences of climate change include the shifting of species ranges, loss of species at the limits of their ranges, eventually the disruption of ecological processes, and damage to the wider goods and services provide by functioning ecosystems.

Science Concerns

Climate change, due to the activities of mankind, must be addressed in the context of it being a global process but, which will need both global and local responses and actions.

- Biodiversity is important, both to humans, through the provision of ecosystem services and in its own intrinsic right, at UK, Irish, EU and global levels.
- There is an indicator role for biodiversity (i.e. monitoring) in measuring climate change effects.
- Appropriate mitigation is required now to safeguard biodiversity against longer-term climate change and its consequences. These measures must be designed and assessed to minimise the potential for unforeseen effects on biodiversity and sustainability.
- (e.g. not bio diesel from palm oil plantations).
- Adaptation opportunities should be provided to facilitate the conservation of biodiversity, (e.g. porosity at a landscape scale (that includes protected areas and the wider countryside), and to promote the resilience of current species' distributions and changes in distribution.
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- Policies and practices must be informed by evidence-based science linking policies in an integrated manner.
- More evidence on the predicted and possible impacts on our biodiversity at a regional and local level is required, though this evidence base is improving all the time.
- IEEM will play its part in promoting high standards of ecological work in order to provide high quality assessments and advice, and in addressing any skills gap in ecological and environmental competencies and capabilities.

Planning and Policy Responses in the UK and Ireland

Actions that tackle the causes of climate change are needed at all levels now. In the planning context this is now beginning to be addressed (e.g. in England via the draft Planning Policy Statement: Planning and Climate Change - Supplement to Planning Policy Statement 1).

- Planning needs to take into account the effects of climate change.
- Future policies (e.g. transport, energy, housing development, etc) need to be integrated with those to address climate change.
- Biodiversity concerns should be addressed within the evolving regional and local planning framework (e.g. through the British Standards Institution's PAS 2010 document, use of sustainability appraisals and Strategic Environmental Assessment, and through the Convention on Biodiversity and Countdown 2010).
- Land management policies and practices must mitigate the production and release of greenhouse gases (e.g. farmland, wetlands and peat bogs) and also provide carbon sequestration services.
- Water management needs to be planned at a catchment/river basin scale to provide effective mitigation and adaptation strategies (e.g. human demand/supply, flooding, drought).

quality concerns, in particular addressing the release of greenhouse gases (e.g. carbon dioxide, methane, nitrous oxide), and those gases that cause acidification, eutrophication, and oxidative damage, must be taken into account in all planning and policy issues.

Mitigation and Adaptations in the UK and Ireland

Actions are needed to minimise the consequences of actual and expected climate change. Lifestyle changes are required at the individual level (as stated in the Stern Review, Nov 2006), as well as at company, organisation, Government and institutional levels.

- Agri-environment schemes and land management planning should be used to offset and buffer impacts on our biodiversity (e.g. sea level rise and , flood management and wetland opportunities).
- Flexibility needs to be built into new conservation policies, and these should be process and system focussed (e.g. geophysical, genetic, biological).
- Ecological networks require defining and implementing nationally and regionally to allow species to migrate as the climate changes.
- Every opportunity should be used to enhance and improve species and biological communities' ecological viability.
- Clear communication and education should underpin all action, and participation by communities encouraged to facilitate the adaptation to the consequences of climate change.

IEEM – Who We Are and What We Do

IEEM is the professional Institute supporting professionals in the fields of ecology and environmental management. The Institute was established in 1991 and currently has around 3,000 members drawn from local authorities, Government agencies, industry, environmental consultancy, teaching/research, and voluntary environmental organisations.

The objectives of the Institute are:

- To advance the science, practice and understanding of ecology and environmental management for the public benefit in the United Kingdom and internationally;
- To further the conservation and enhancement of biodiversity and maintenance of ecological processes and life support systems essential to a fully functional biosphere;
- To further environmentally sustainable management and development;
- To promote and encourage education, training, study and research in the science and practice of ecology, environmental management and sustainable development;
- To establish, uphold and advance the standards of education, qualification, competence and conduct of those who practise ecology and environmental management as a profession and for the benefit of the public.

IEEM is a member of SocEnv (The Society for the Environment), EFAEP (The European Federation of Associations of Environmental Professionals) and IUCN (The World Conservation Union). IEEM has also signed up to the Countdown 2010 agreement to halt the loss of biodiversity.

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