

FIRST ANNOUNCEMENT

SCIENCE FOR THE ENVIRONMENT – ENVIRONMENT FOR SOCIETY

**Bridging the gap between scientists and practitioners
in environmental science**

International conference in Denmark (Aarhus)
5-6 October 2011

Meeting European environmental legislation

– the Directives under scrutiny

2010 behind us

– is biodiversity in free fall?

A low impact, low carbon economy

– socio-economic implications for ecosystems and human health

Making decisions

– management tools for the future



NATIONAL ENVIRONMENTAL RESEARCH INSTITUTE
AARHUS UNIVERSITY



Background and description of topics

Environmental science is addressing complex cross-disciplinary, cross-sectoral problems, some of which are among the greatest challenges facing society. The complexity of these challenges and the need to find practical and sustainable solutions requires close interchange of ideas and applications between research scientists, administrators, consultants and other end-users to promote workable, evidence-based regulations and policy.



This conference brings researchers from many different fields within environmental science together with practitioners to exchange knowledge, to identify research gaps and to discuss how new scientific knowledge can be implemented most effectively in practical environmental management.

The overarching aim of the conference is to place existing scientific knowledge of environment and society within the context of relevant EU environmental legislation, and vice versa. The common theme is: **“How can we ensure that the research agenda and policy solutions are sufficiently holistic to address the complex issues which interlink science, environment and society”**. The main topics cover a range of issues which confront both scientists and practitioners within today’s legislative policy framework.

Topic I (day 1)

Meeting European environmental legislation – the directives under scrutiny

With Denmark as the EU chair in 2012, the time has come to take a closer look at European environmental legislation. A multitude of EU Directives cover almost all ecosystems, and each Directive has different goals and performance indicators. How should Directives be implemented to ensure they are cost-effective whilst also taking the complexity of issues and problems into account?

The first day of the conference will hold scientific sessions back-to-back with end-user driven workshops spanning different sectors and directives. Directives under scrutiny will include: the Marine Strategy Framework Directive, the Water Framework Directive, the Habitats Directive, the Air Quality Directive, the Nitrate Directive, the Groundwater Directive and others.

The science behind the implementation of Directives will be discussed in parallel sessions with different cross-cutting perspectives, e.g. focus on nature conservation across sectors or focus on human health and welfare across policies. The scientific discussions will be put into perspective in related workshops focusing on practical issues of implementation.

Topic II (day 2)

2010 behind us – is biodiversity in free fall?

Biodiversity – the rich variation in genomes, species and ecosystems – is an extremely valuable natural legacy that the global community is obliged to protect. Disturbingly, the UN estimates that species are now disappearing at 100 to 1000 times the natural extinction rate.





PHOTO: LARS KRUSE / Aalborg University

The World Summit on Sustainable Development held in Johannesburg in 2002 confirmed the 2010 Biodiversity Target originally put forward at an EU summit in 2001 and called for "the achievement by 2010 of a significant reduction in the current rate of loss of biological diversity". The UN furthermore declared 2010 as the Year of Biodiversity but the essential question is: 'Did nature notice?' How can we learn from past successes and failures in protecting biodiversity on the route to the 2010 target and how can we build upon those successes in the approach to 2020?

Topic III (day 2)

Low impact – low carbon economy

National and supra-national regulations and treaties are modifying the local and global combustion mix for energy generation and transportation, and adjusting the atmospheric signature of industry and agriculture. These changes will affect greenhouse gas concentrations, atmospheric deposition into terrestrial, aquatic and marine ecosystems and also impact directly and indirectly on human health.

This session will focus on the challenge of identifying, analysing and quantifying the consequences of these changes and assessing their implications for Directive-driven legislation. Interdisciplinary studies and integrating approaches will be discussed.

Topic IV (day 2)

Making decisions – management tools for the future

Combining legislation spanning local to the supra-national levels with tools which operate at relevant scales is a major challenge for the future support of evidence-based decision making. Today, the majority of decision support tools operate at local scales, limiting managers' possibilities for synergistic implementation of mitigation measures across a range of different scales.

Furthermore, indicators and assessment systems are often site- and stressor-specific, which again makes synergistic extrapolations and diagnostics difficult. Large-scale spatial models and ensemble modelling appear to be promising future avenues for bridging these gaps, but uncertainties must be quantified to enable appropriate decision making on the basis of model outputs. The conference aims to help solve this dilemma by bringing modellers, administrators and practitioners together to exchange ideas for the development of management tools for the future.

Conference structure

The conference will offer scientific sessions back-to-back with end-user workshops. Scientific sessions will include talks by invited keynote speakers, oral presentations and poster presentations selected on the basis of submitted abstracts. The conference will open with plenary talks, followed by up to three parallel sessions and ending with a plenary discussion.

European Directives will be the topic of the first day. The three remaining topics will be covered in parallel sessions on the second day.

Venue and further information

The conference venue is the Lakeside Lecture Theatres at Aarhus University Campus in the city of Aarhus, located in the western part of Denmark.

The provisional conference programme, as well as first call for papers, will be sent out soon. The latest news will be available on the conference website: www.environment2011.dmu.dk. The deadline for contributions and early registration is expected to be the end of April 2011.

Who should attend?

The conference is for scientists, Ph.D. students, administrators, managers, representatives of consultancy firms and non-governmental organizations as well as decision-makers working with all environmental aspects of the natural and social sciences and/or in practical environmental management. The conference language is English (some workshops will be in Danish).

Conference organisation

The organising committee is based at the National Environmental Research Institute, Aarhus University. Members include: Anja Skjoldborg Hansen, Nikolai Friberg, Lise Marie Frohn, Flemming Skov and Jim Smart.

Conference secretariat consists of Anja Skjoldborg Hansen and Charlotte Hviid Nielsen. The conference is organised in collaboration with Partnership for European Environmental Research (PEER), the Danish Ministry of the Environment as well as a conference advisory board.

Contact information

For more information, please visit the conference website www.Environment2011.dmu.dk or e-mail the conference secretariat: Environment2011@dmu.dk



PHOTO LARS KRUSE / AUFOTO

Environment Conference Secretariat

National Environmental
Research Institute
Aarhus University
Frederiksborgvej 399
PO Box 358
DK-4000 Roskilde
Environment2011@dmu.dk



NATIONAL ENVIRONMENTAL RESEARCH INSTITUTE
AARHUS UNIVERSITY

