

Aarhus University and Partnership for European Environmental Research (PEER) calls for papers for

SCIENCE FOR THE ENVIRONMENT

2nd International conference in Aarhus, Denmark 3-4 October 2013

MAPPING KNOWLEDGE NEEDS FOR FUTURE HORIZONS

Identifying knowledge gaps for the Climate Action and Resource Efficiency Challenge in Horizon 2020

First Call for papers and Special Sessions

Why should you attend?

- · Show how your field of research can support solutions of the grand challenges facing society
- · Communicate your view on the future research needs to the European Commission and help shape the future European Research Agenda in Horizon 2020
- · Meet potential partners for future Horizon 2020 calls

Main themes

- Climate action
- mitigation and adaptation Resource efficiency
- natural resources, ecosystems, raw materials
- Green economy
- eco-innovation

More information: http://dce-conference.au.dk







Background and objectives

Horizon2020 is the European Commission's Framework Programme for Research and Innovation, covering the period 2014-2020. One of the aims of the programme is to promote scientific research that tackles the grand societal challenges facing Europe and the World. This conference is an opportunity to gain insight and impact on which scientific needs that are going to be addressed in Horizon2020.

Horizon 2020 points to six major societal challenges to which the research community should identify solutions. One of these is the challenge: Climate action, resource efficiency and raw materials. The societal challenges part of Horizon 2020 should increase the effectiveness of research and innovation using a challenge-based approach, bringing together resources and knowledge across different fields, technologies and disciplines, including social sciences and humanities research.

Aarhus University and the Partnership for European Environmental Research (PEER) will by this conference, bring research activities together across disciplines to foster solutions to the challenges facing society. Fifteen years after the UN Aarhus Convention was agreed in Aarhus, we will involve the scientific community in a transparent and evidence-based process to inform and inspire the European strategic research agenda, in support of a green and prosperous future for Europe and the World. The conference will include facilitated topical workshops, where proposals will be formed for future research needs in an open process.

We therefore invite researchers to Aarhus University on the October 2-4, 2013 to take stock of and assess the scientific progress towards tackling the grand environmental challenges. And to apply the outcome to provide input to the European Commission on the knowledge gaps and future research needs in Horizon 2020.

The Partnership for European Environmental Research (PEER), of which DCE/Aarhus University is a member, will take the collected advice of the conference to the Commission and communicate the views of the research community to DG Research in November 2013, to incorporate these in the process of developing and improving the strategic research agenda of Horizon 2020.

Call for abstracts

We call for abstracts within the three major themes:

- · Climate Action
- Resource Efficiency
- Green Economy

Papers should seek to address critical elements of the main theme and analyse scientific results to point towards future research needs and knowledge gaps that need to be addressed in order to lead to further societal change and innovation in the field. Topical workshops will be arranged where participants get together and prioritise and structure the proposals for future research needs, based on the presentations.

Abstracts with a length of no more than 300 words should be sent before May 1st to the conference E-mail address: environment2013@au.dk A template for abstract submission will be available via the website http://dce-conference.au.dk

Abstracts will be reviewed by an international scientific committee. Full papers may be submitted at the time of the conference, and will be reviewed for publication in the published conference proceedings, which will be sent to all participants after the conference. The conference proceedings will be published as a scientific report in DCE report series. Acceptance of oral presentations and posters will be announced by June 15th.



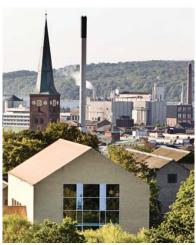


FOTO: LARS KRUSE/AU-FOTO

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Call for special sessions

Researchers who would like to organise a Special Session on a topic falling within the scope of the conference are invited to submit a proposal for consideration. These special sessions could contain 3-5 papers which the proposer will obtain from colleagues.

If your proposal results in a session, you will be chairing the session at the conference. The role of a Session Chair is to give a short introduction at the start of the session, chair the session according the general guidelines and give a short summary of the presentations at the end of the session. Also you will be asked to provide a written summary to be used for the workshop discussions and summing up.

Your session proposal should have the following format:

- · Session title
- · Session description/motivation: max 3000 characters;
- 3-5 abstracts for papers included in the session as presentations + possible abstracts for poster presentations in connection with the session
- Session proposals should be submitted by May 1st to the conference E-mail address: environment2013@au.dk A template for abstract submission will be available via the website http://dce-conference.au.dk

Description of session topics

Climate action

The aim of the activity of "Climate action" is to develop and assess innovative, cost-effective and sustainable adaptation and mitigation measures.

Mitigation: Improve the understanding of climate change and support mitigation policies Better understanding of the causes and evolution of climate change and more accurate climate projections are needed. Papers should especially address the environmental and socioeconomic risks, opportunities and impacts of climate change mitigation options.

Adaptation: Assess impacts, vulnerabilities and develop innovative cost-effective adaptation. There is incomplete knowledge on the ability of society and the economy to adapt to climate

change. Papers could address the impacts and growing risks for ecosystems and human health stemming from climate change, cost-effective adaptation responses to climate change and conflicts and synergies of adaptation and other policy choices.



FOTO: LARS KRUSE/AU-FOTO

Resource efficiency

The aim of this session topic is to provide knowledge for the management of natural resources that strives towards achieving a sustainable balance between limited resources and the needs of society and the economy.

Understanding of ecosystems and their role in sustaining the economy and decision making

Society's actions risk triggering changes in the environment that are irreversible and which alter the character of ecosystems. It is vital to anticipate these risks by assessing, monitoring and forecasting the impact of human activities on the environment, and environmental changes on human well-being through the delivery of ecosystem services. This could include research into global environmental monitoring and observation systems. Presentations should focus on how ecosystems function and react to anthropogenic impacts, how they can be restored, and how this will aff ect economies and human well-being. The session will also investigate solutions for addressing resource challenges.

Ensuring the sustainable supply of raw materials

The European Union is highly dependent on imports of metallic minerals and is totally import dependent for some critical raw materials, increasingly driven by emerging economies.. It is necessary to develop solutions for the cost-effective and environmentally friendly exploration, extraction, processing, recycling and recovery of raw materials and for their substitution by economically attractive alternatives with a lower environmental impact.

Green Economy - Eco-innovation

Decoupling growth from the use of natural resources requires structural changes in how such resources are used, re-used and managed, while safeguarding our environment. Eco-innovations have the potential to to reduce pressure on the environment, increase resource efficiency, and if cleverly used may put Europe on the path to a resource and energy efficient economy. Eco-innovation could create opportunities for growth and jobs, and may increase European competitiveness within the global market.

Strengthen eco-innovative technologies

Presentations will underpin a more circular economy, while reducing environmental impacts and taking account of rebound effects on the environment. The aim will be to improve resource efficiency along the value chain.

Green economy and policies

Structural and institutional changes are needed to enable the transition towards a green economy, papers should address the main barriers to societal and market change. It is also necessary to develop robust indicators to support and assess the transition towards a green economy and the effectiveness of relevant policy options.



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Venue and further information

The conference venue is the Lakeside Lecture Theatres at Aarhus University Campus in the city of Aarhus, Denmark. The latest news will be available at the conference website: http://dce-conference.au.dk. The conference dates are Wednesday October 2nd (evening programme only) to Friday October 4th. A conference dinner will be held Thursday evening October 3rd.

Who should attend?

The conference is for scientists within all disciplines, Ph.D. students, administrators, managers, representatives of industry and non-governmental organisations as well as decision-makers working on the topics encompassed by the Climate Action and Resource Efficiency challenge. The conference language is English.

Conference organisation

The organising committee is based at DCE - Danish Centre for Environment and Energy, Aarhus University. Members include: Anja Skjoldborg Hansen (chair), Hans Sanderson (Scientific Committee Chair), Helge Rørdam Olesen, Jesper H. Andersen, Peter Borgen Sørensen and Karin Balle Madsen. The conference is organised in collaboration with Partnership for European Environmental Research (PEER) as well as a conference scientific committee.

Payment and registration



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