

2<sup>ND</sup> INTERNATIONAL CONFERENCE  
AARHUS UNIVERSITY



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# SCIENCE FOR THE ENVIRONMENT

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MAPPING KNOWLEDGE NEEDS FOR FUTURE HORIZONS

3-4 October 2013



# PROGRAMME

## WEDNESDAY OCTOBER 2<sup>ND</sup>

17.00-18.30 Reception and early registration, Town Hall

## THURSDAY OCTOBER 3<sup>RD</sup>

8.00-9.00 Registration at Lakeside Lecture Theatres, Aarhus University

### Auditorium 1 Per Kirkeby

9.00-10.30 **Opening session**

Chair: Hanne Bach, Director of DCE – Danish Centre for Environment and Energy, Aarhus University

Niels Christian Nielsen, Dean, Faculty of Science and Technology, Aarhus University

Jean-Marc Bournigal, Director of Irstea (France) and chair of PEER – Partnership for European Environmental Research

Anne Glover, Chief Scientific Advisor to the European Commission

Andrea Tilche, Head of Unit, DG Research, European Commission

Hans Bruyninckx, Director of European Environment Agency (EEA)

Claus Stig Pedersen, Head of Sustainability Development, Novozymes

10.30-10.50 **Coffee break**

10.50-12.50 **Key-note speakers**

Chair: Hans Sanderson

David Gee, Co-author: Late lessons from early warnings, EEA

Frans Berkhout, Amsterdam Global Change Institute

Anil Markandya, BC3, The Basque Climate Change Research Centre

Roger Street, UKCIP, Environmental Change Institute at the University of Oxford

12.50-13.30 **Lunch**

THURSDAY OCTOBER 3<sup>RD</sup>

	<b>Auditorium 1</b> <b>Per Kirkeby</b>	<b>Auditorium 2</b> <b>Merethe Barker</b>	<b>Auditorium 3</b> <b>Eduard Biermann</b>	<b>Auditorium 4</b> <b>Jeppe Vontillius</b>
13.30-15.10	<p><b>Adaptation – 1</b> Session 1 Chair: Sergio Castelliari Rapporteur: Hans Sanderson</p> <p><b>P.A. Harrison et al.</b> The potential for adaptation to offset the cross-sectoral impacts of climate change on European natural resource sectors 1.1</p> <p><b>F. Bosello et al.</b> Identifying key challenges to developing climate adaptation strategies in Europe 1.2</p> <p><b>T. Taylor et al.</b> Towards a Marginal Adaptation Cost Curve for Health: A critical synthesis 1.3</p> <p><b>O. Gebhardt et al.</b> Decision support for climate change adaptation under uncertainty 1.4</p> <p><b>B. Bockhorn et al.</b> Challenges for stormwater infiltration in urban areas 1.5</p>	<p><b>Mitigation – 1</b> Session 2 Chair: Joachim Audet Rapporteur: Birgitte Egelund Olsen</p> <p><b>J.H. Bønløkke et al.</b> Effects of a very low energy building scenario in Europe on health 2.1</p> <p><b>K. Peterkova</b> Calculating Potential for Emission's Reduction via Supply Chain Contracts 2.2</p> <p><b>J. Audet et al.</b> Greenhouse gas emissions from a Danish riparian wetland before and after restoration 2.3</p> <p><b>H.K. Nielsen et al.</b> Sustainability and road transport in Norway 2.4</p> <p><b>U.S. Brandt &amp; G.T. Svendsen</b> Carbon leakage, renewable energy and coalitions 2.5</p>	<p><b>Resource Efficiency – 1</b> Session 3 Chair: Joachim Maes Rapporteur: Marianne Thomsen</p> <p><b>C. Ditlefsen et al.</b> Ground Source heating and cooling - elements in a sustainable energy supply 3.1</p> <p><b>L. Lamorgese &amp; D. Geneletti</b> Addressing equity in land use decisions: A case study in the Oil and Gas sector 3.2</p> <p><b>T. Kuhn et al.</b> Energy policy, food, and climate change - a numerical simulation approach 3.3</p> <p><b>A.R. Tan et al.</b> Analysing (in)efficiencies in the use of raw materials and underlying drivers – what are existing knowledge gaps and research needs? 3.4</p> <p><b>M. Garnier et al.</b> Climate change and water. Identification of the research needs in Europe 3.5</p>	<p><b>Green Economy – 1</b> Session 4 Chair: Nicholas Corker Rapporteur: Anja Skjoldborg Hansen</p> <p><b>N. Tabesh &amp; N.T. Beydokhti</b> Investigation of textile wastewater treatment, using a system of Sub Surfaceconstructed wetland 4.1</p> <p><b>C.-G. Thulin et al.</b> Multipurpose wildlife: Food, recreation and biodiversity combined 4.2</p> <p><b>S.G. Sommer et al.</b> Biogas from beet pulp and source separated household waste- Energy production and Greenhouse Gas Reduction 4.3</p> <p><b>T. Dalgaard</b> Models for multi-criteria sustainability assessment of a new more biobased and circular economy 4.4</p> <p><b>R. Merli et al.</b> EMAS regulation in Italian clusters: investigating the involvement of local stakeholders 4.5</p>
15.10-15.30	<b>Coffee break</b>			

	<b>Auditorium 1 Per Kirkeby</b>	<b>Auditorium 2 Merethe Barker</b>	<b>Auditorium 3 Eduard Biermann</b>	<b>Auditorium 4 Jeppe Vontillius</b>	<b>Auditorium 5 William Scharff</b>
15.30-17.10	<p><b>BASE</b> Special session 5 Chair: Hans Sanderson Rapporteur: Sergio Castelliari</p> <p><b>D. Russel et al.</b> A BASE project analysis of EU Member State Climate Change Adaptation Strategies: Comparing approaches and drawing lessons 5.1</p> <p><b>F. Bosello et al.</b> Integrating top-down and bottom-up perspectives in adaptation assessment 5.2</p> <p><b>X. Li et al.</b> BASE: A robust strategy for adaptation case study research 5.3</p> <p><b>G. Penha-Lopes et al.</b> Case-Studies - their potential and challenges within BASE project 5.4</p> <p><b>A. Jeuken et al.</b> BASE: integrated adaptation pathways at EU level - how to combine case data with models 5.5</p>	<p><b>LIAISE</b> Special session 6 Chair: Jacques Janssen Rapporteur: Sander Janssen</p> <p><b>T. Söderman et al.</b> The LIAISE approach to co-designing knowledge on impact assessment 6.1</p> <p><b>O. Roosenschoon et al.</b> The shared IA toolbox 6.2</p> <p><b>N. Glæsner et al.</b> Impact assessment of soil protection policies in Europe 6.3</p> <p><b>S. Janssen et al.</b> Impact assessment for Sustainable development: A vision for future development 6.4</p>	<p><b>Bioresources</b> Session 7 Chair: Marianne Thomsen Rapporteur: Helge Rørdam Olesen</p> <p><b>M. Seghetta et al.</b> Circular resource flows from algae production 7.1</p> <p><b>J.K. Petersen et al.</b> Mussel production to utilize excess nutrients in fjords - is it cost-costeffective as mitigation measure? 7.2</p> <p><b>A. Trémier et al.</b> Eco-efficient post treatment of digestate from single and mixed biogas plants 7.3</p> <p><b>K. Spilling et al.</b> The potential of using algae as feedstock for biofuel, a Nordic perspective 7.4</p> <p><b>I. Johannsen</b> Getting value out of biomass, high value chemicals from lignocellulosis 7.5</p>	<p><b>Rebound effects</b> Special session 8 Chair and rapporteur: Anja Peters and Martin Soland</p> <p><b>M. Soland</b> Environmental responsibility denial due to optimism in green technology 8.1</p> <p><b>H.J. Walnum</b> Interdisciplinary understanding of macro-rebound effects 8.2</p> <p><b>H. Marth &amp; A. Peters</b> Developing a policy guideline for rebound effects 8.3</p> <p><b>C. Sartorius &amp; M. Pfaff</b> Measuring Macroeconomic Rebound Effects for Non-energetic Resources 8.4</p> <p><b>A. Peters et al.</b> Exploring and analyzing relevance and psychological drivers of rebound effects 8.5</p>	<p><b>Afromaison</b> Special session 9 Chair: Nils Ferrand Rapporteur: Dominique Laborde</p> <p><b>N. Ferrand et al.</b> Participatory planning and role playing games for multilevel INRM in Africa 9.1</p> <p><b>R. Ducrot et al.</b> Conditions and results of a joint monitoring and evaluation protocol in 5 countries 9.2</p> <p><b>A. Kabaseke et al.</b> The Rwenzori Mountain case (UG): A pilot for large scale social extension, exploration and institutionalization of a change strategy for Integrated Natural Resource Management from grass root to regional level 9.3</p> <p><b>D. Mori</b> A way to plan, play, assess and monitor a participative integrated natural resource management (INRM) in Inner Niger Delta (IND) in general and three (3) municipalities level in particular in the frame of FP7 AFROMAISON 9.4</p>
17.10-18.15	<b>Poster Session</b>				
18.30	<b>Doors open at Turbinehallen</b>				
19.30	<b>Conference Dinner</b>				

# FRIDAY OCTOBER 4<sup>TH</sup>

	<b>Auditorium 1</b> <b>Per Kirkeby</b>	<b>Auditorium 2</b> <b>Merethe Barker</b>	<b>Auditorium 3</b> <b>Eduard Biermann</b>	<b>Auditorium 4</b> <b>Jeppe Vontillius</b>	<b>Auditorium 5</b> <b>William Scharff</b>
8.30-9.00	Sebastian Helgenberger, University of Natural Resources and Life Sciences, Vienna: Transformative Research in Europe: Can research accompany societal change? Should it?				
9.00-10.40:	<b>Adaptation – 2</b> Session 10 Chair: Helle Ørsted Nielsen Rapporteur: Ursula Schmitz		<b>Ecosystem services – 1</b> Session 12 Chair: Eeva Primmer Rapporteur: Joachim Maes	<b>Gender, energy and climate change</b> Special session 13 Chairs and rapporteurs: Susan Buckingham & Inés Sánchez de Madariaga	<b>JPI Climate</b> Special session 11 Chair: Eva Banos de Guisasaola Rapporteur: Hans Sanderson
	<p><b>R.J. Klein &amp; S. Juhola</b> A Framework for Nordic Actor-Oriented Climate Adaptation Research <b>10.1</b></p> <p><b>M. Hildén et al.</b> A BASE-analysis of adaptation in coastal areas – what can EU policies do? <b>10.2</b></p> <p><b>S. Weiland et al.</b> The EU climate adaptation strategy: An evaluation of its 'programme theory' <b>10.3</b></p> <p><b>H.Ø. Nielsen et al.</b> How will the EU climate adaptation strategy affect EU agricultural policies? <b>10.4</b></p> <p><b>A. Iglesias et al.</b> Water for people and for the environment: Linking modelling and participatory approaches to define adaptation in the Tagus basin, Iberian Peninsula <b>10.5</b></p>		<p><b>R. Alkemade &amp; T. Lazarova</b> Consequences of EU environmental policies for ecosystem service provision elsewhere <b>12.1</b></p> <p><b>C. Schleyer &amp; J. Hauck</b> The ecosystem services concept in EU policies: A review of regulatory frameworks <b>12.2</b></p> <p><b>E. Primmer et al.</b> How does governance contribute to conservation of biodiversity and ecosystem services: A conceptual model of knowledge use and the effects of arguments and policies <b>12.3</b></p> <p><b>S. Borgström &amp; J. Similä</b> Developing regulatory frameworks for green infrastructure: Issues to be addressed <b>12.4</b></p> <p><b>J. Maes</b> Mapping and assessment of ecosystems and their services: Developing a knowledge base for mainstreaming ecosystem services into EU policies <b>12.5</b></p>	<p><b>Inés Sánchez de Madariaga</b> Presentation of COST network gender STE: Mapping the state of the art in Gender, Energy and Climate Change</p> <p><b>Karen Morrow</b> Women's Participation in Climate Change Governance; why we need it, how we can reduce barriers</p> <p><b>Hilda Rohmer</b> Impact of gender differences in transport on energy consumption and climate change</p> <p><b>Sherilyn MacGregor</b> The politics of energy consumption in the North: feminist challenges to dominant discourses</p> <p><b>Berit Aasen</b> A gendered view from the South: access to energy and impact of climate change</p> <p><b>Marcella Schmidt</b> Women facing change: the climate dimension</p> <p><b>Richard Langlais</b> Who responds to climate change best? A perspective from Swedish municipalities</p> <p><b>Discussion</b></p>	<p>1. Discussion of key questions on the science-policy interface</p> <p>2. A general presentation of JPI climate</p> <p>3. Identification of knowledge gaps</p> <p>Moving towards Reliable Decadal Climate Predictions: <b>Sylvie Joussaume (France) and Sanna Sorvari (Finland)</b></p> <p>Researching Climate Service Development and Deployment: <b>Roger Street (UK)</b></p> <p>Sustainable Transformations of Society in the Face of Climate Change: <b>Lisa Almesjö, Sebastian Helgenberger (AU)</b></p> <p>Decision-support methods and tools for Climate Change: <b>Gregor Laumann (GE)</b></p> <p>Integrating the JPI climate: <b>Roger Street (UK)</b></p>
10.40-11.00	<b>Coffee break</b>				

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11.00-12.40	<b>Adaptation – 3</b> Session 14 Chair: Jeppe Læssøe Rapporteur: Hans Sanderson	<b>Mitigation – 2</b> Session 15 Chair: Mikael Hilden Rapporteur: Peter Borgen Sørensen	<b>Ecosystem services – 2</b> Session 16 Chair: Mette Termansen Rapporteur: Chris Topping	<b>Green Economy – 2</b> Session 17 Chair: Ellen Margrethe Basse Rapporteur: Nicholas Corker
	<p><b>M.J. Polo &amp; M.A. Losada</b> Including the human factor in adaptative actions to face climate change <b>14.1</b></p> <p><b>G. Martinez et al.</b> Socio-economic and cultural contingencies in the planning, implementation and transfer of climate adaptation action <b>14.2</b></p> <p><b>P.A. Werner</b> General and particular social vulnerability to natural hazards in Poland <b>14.3</b></p> <p><b>F. Riede</b> Towards an applied science of past disasters <b>14.4</b></p> <p><b>A. Jensen et al.</b> Urban adaptation to climate change and differing capacities of cities to adapt <b>14.5</b></p>	<p><b>A. Berg et al.</b> Transformative experiments as strategic tools in climate governance – Case studies from Finland <b>15.1</b></p> <p><b>M. del Mar Delgado-Serran et al.</b> Linking knowledge to action <b>15.2</b></p> <p><b>J. Hesselbjerg et al.</b> Climate change in Denmark: Models, uncertainties, effects and adaptation <b>15.3</b></p> <p><b>M. Uddin</b> Role of Clean Development Mechanism (CDM) in Transfer of Environmentally Sound Technologies (ESTs) and attaining sustainable development goals <b>15.4</b></p> <p><b>V. Daptardar &amp; M. Gore</b> Scaling up Inclusive and Sustainable Development through Green Finance in India <b>15.5</b></p>	<p><b>K.G. Turner et al.</b> The socio-ecological scales of ecosystem service bundles in Denmark <b>16.1</b></p> <p><b>M. Zandersen et al.</b> Climate regulating service – A spatial analysis assessing the effectiveness and economic efficiency of ecosystem service based management <b>16.2</b></p> <p><b>A.H. Petersen et al.</b> Biodiversity and ecosystem services in Danish forests: Optimizing multiple objectives <b>16.3</b></p> <p><b>S.E. Vedel et al.</b> Valuing the benefits and costs of provision of ecosystem services from Danish forests <b>16.4</b></p> <p><b>R. Brooker et al.</b> The ecosystem approach: improving resource use &amp; sustaining ecosystem services <b>16.5</b></p>	<p><b>R. Antikainen et al.</b> Boosting of eco-innovations – policy steps promoting green economy <b>17.1</b></p> <p><b>C.F. Yee &amp; E.C. Tan</b> Social Cost Benefit Analysis Way to Efficient Resource Utilization <b>17.2</b></p> <p><b>E.M. Basse</b> The Legal Conditions for Water Utilities Eco-innovation as Energy Smart Water Utilities <b>17.3</b></p>
<b>WORKSHOPS (INCL. LUNCH)</b>				
12.40-14.30		<b>Workshop Climate Action</b> Mitigation/Adaptation Workshop leader: Mikael Hildén Facilitators: Hans Sanderson and Peter Borgen Sørensen	<b>Workshop Resource efficiency</b> Understanding ecosystems/Raw materials Workshop leader: Joachim Maes Facilitator: Helge Rørdam Olesen	<b>Workshop Green economy</b> Green economy/Eco-innovation Workshop leader: Nicholas Corker Facilitator: Anja Skjoldborg Hansen
14.30-15.30	<b>Summary of workshops and closing</b>			