# **Coordination Unit for Research** in Climate Change Adaptation





### 1. Background, goals and mandate

Climate Change is widely accepted to be threatening mankind's livelihood. Adaptation to the prospects of an altered future climate is needed across a range of societal sectors, including coastal zone management, construction and planning, water resource management, energy supply, agriculture, land use and forestry, fisheries, nature management, the health sector, disaster relief, the insurance sector, and many others. However, the development and implementation of robust adaptation measures need to be informed by the best available research – building on findings from a broad range of scientific disciplines.

The Danish government's 'Strategy for Adaptation to Climate Change in Denmark' identifies a need to strengthen the coordination of national research activities in the context of climate change adaptation, and to ensure that synergies across a broad range of different research areas are harvested. Thus, the strategy calls for the establishment of and gives a mandate to a national Coordination Unit for Research in Climate Change Adaptation with the overarching goal to strengthen synergies between research activities related to climate change adaptation in Denmark in view of providing solid information to societal decision-making processes.

The Coordination Unit for Research in Climate Change Adaptation (in Danish: Koordineringsenhed for Forskning i klimaTilpasning - KFT) is a joint endeavour by the National Environmental Research Institute at the University of Aarhus, Denmark's Meteorological Institute, the Geological Survey of Denmark and Greenland (GEUS), University of Copenhagen and Denmark's Technical University. The coordination unit aims to collate and transfer knowledge within all Danish (and international) research areas that work on the issue of climate change adaptation, and to help coordinate information access at the science-policy interface. This activity necessarily builds on strong cooperation across a wide range of scientific disciplines as well as regular interaction with both the policy-makers and other stakeholders.

The main objectives of Coordination Unit for Research in Climate Change Adaptation are

- to coordinate national-level research activities on adaptation to Climate Change;
- to facilitate research synergies and identify knowledge gaps;
- to support transfer of knowledge;
- to collate authoritative data on climate change and impacts;
- to foster national and international networks.



### 2. Organisation and governance

The coordination unit has a three-level management structure: Steering Committee, Secretariat and Science Advisory Group. Each has a clear and distinct role (Figure 1). The coordination unit refers to the Coordination Forum on Adaptation, and supports the Information Centre on Adaptation (Videncenter) hosted by the Climate and Energy Ministry which interacts with stake-holders, sectors and the different authority levels.

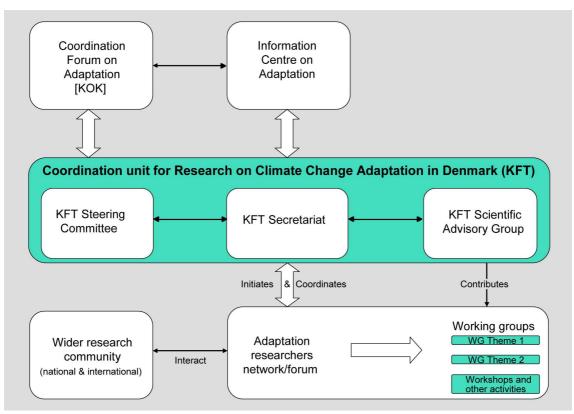


Figure 1 - Organisation: management and reporting structure

The *Steering Committee* (SC) oversees overall implementation and administration issues. In this it is supported by a secretariat and co-ordinates tactical aspects of the whole KFT unit, including funding and liaison with the inter-ministerial coordination group. The SC includes unit's partner organisations; and a chairperson appointed by the inter-ministerial coordination group.

The *KFT Secretariat* is hosted by Denmark's National Environmental Research Institute at Aarhus University. The core staff ensures the implementation of the unit's work programme and the secretarial tasks outlined below. In addition, associated experts are added to the secretariat both on a more regular basis (e.g. to support data transfer to the website 'Klimatilpasningsportal') and on an ad-hoc basis (e.g. to contribute to work on Specific Tasks or Working Groups). The secretariat reports to the Steering Committee.



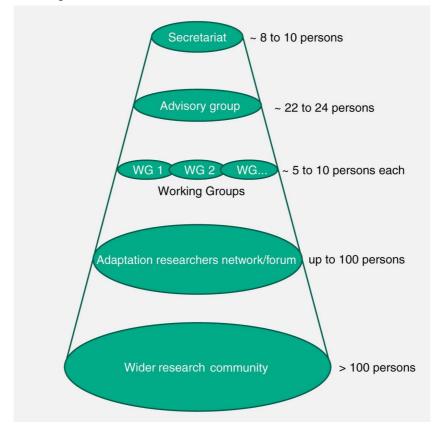
The scientific *Advisory Group* (AG) provides overall guidance and ensures scientific rigour. It comprises 23 leading scientists from a wide range of disciplines working on climate change adaptation issues. The AG formally meets two to three times a year, but both formal and informal contacts between secretariat and AG members are maintained throughout. The AG meetings are hosted with support from the coordination unit's secretariat. A chairperson for the AG, who sets the meeting agendas jointly with secretariat, is appointed by the SC. Key tasks of the AG are:

- Establish 'Working Groups', which address crosscutting research themes and draft 'KFT Research briefs' (see below)
- Chair and support the work of 'Working Groups', and suggest additional researcher to support this work
- Review and quality assure work done in 'Working groups' and of other deliverables of work done in KFT context
- Provide scientifically based advice to relevant research bodies and the wider policy arena.



# 3. Implementation strategy and tasks

The work programme of the coordination unit is endorsed by the SC and primarily implemented at four distinct working levels: Secretarial Tasks, Working Groups, Adaptation Research Forum, and Specific Tasks.



*Secretarial Tasks* relate to the day-to-day management of activities and the implementation of the work programme of the unit. Key regular activities of the secretariat include:

- maintaining a database of on-going research activities;
- draft background papers and policy briefs;
- channel input into the website of the Climate Ministery 'Klimatilpasningsportal';
- interact with ministerial group as delegated by SC;
- foster national and international networks;
- Secretariat for SC and AG;
- organise and facilitate Advisory Group;
- initiate, coordinate and facilitate Working Groups;
- interact with Contact Group;
- draft regular Newsletters (see below).



*Working Groups* on specific topics are established to focus work on thematically cross-cutting adaptation related issues over a period of a few months. A key outcome of a 'Working Group' is to draft 'KFT Research Briefs' that aim to provide an overview and synthesise of the current status of research on respective topics (see below). Preferably a 'Working Group' is lead either by an AG member or by an expert nominated by the AG. A 'Working Group' should also include at least two to four additional members of AG, representing other sectors in order to ensure harvesting thematically cross-cutting ideas. Furthermore, additional experts may be invited to support the work at the Working Group's request. The working mode of a 'Working Group' is flexible, and depends much on the AG member coordinating work.

A broader *Adaptation Research Network* – also labelled as *Forum* – is established based on a mapping of adaptation research in Denmark (this mapping is carried out in Fall 2008). This forum will include between 50 and 100 people – and provide a 'pool' of researchers interested in and willing to contribute to the work of specific Working Groups. The secretariat interacts with the contact group on a regular basis (i.e. per Newsletter).

Additional *Specific Tasks* can be initiated by and with the support of the secretariat, also taking into account the recommendations of the scientific Advisory Group in the choice of topics. The tasks can be lead by the secretariat or AG members – if so approved by the Chair of the SC. Such tasks may include events or workshops on specific cross-cutting issues with the aim to bring together researchers from different scientific communities (as well as stakeholders): in contrast to Working Groups, however, such other activities do not need to result in Research Briefs, nor do they receive extensive support by the secretariat. Instead, the output of such tasks may be background notes, research proposals, or workshop reports. Another conceivable specific task is to establish a contact group to help ensure consistent data support towards the secretariat and the 'Klimatilpasningsportal'. Also, a full-blown scenario exercise bringing together a range of researchers and stakeholders to scope future research prospects might be initiated. While the format and output of specific tasks may vary, the outcomes of such other activities are typically reported on in newsletters.

# 4. Key outcomes and products

Key outcomes and products foreseen to result from the unit's activities over the next years include:

*KFT Research Briefs:* Research Briefs are 10 to 20 page summaries of the current state-of-the-art in a particular field of research related to climate change adaptation. Research Briefs are requested by the SC, based on the recommendation of AG and secretariat. They are produced by Working Groups, and reviewed by the AG.

*KFT Briefs*: KFT Briefs are 2 to 10 page notes on policy relevant issues related to current research on climate change adaptation. These Briefs can either be requested by the Steering Committee (based on requests by the inter-ministerial coordination group), or developed on initiative of the secretariat. KFT briefs are reviewed and approved by the SC.

*Database of researchers and on-going research activities:* A key task of secretariat is to develop and maintain a database on on-going research activities in Denmark and Europe. This database is geared to find synergies between and gaps in current research activities. At first this database will be for internal use only; however, this may later develop into a web-based application.

*Input to 'Klimaportal:* Another key task of the secretariat is to facilitate input into the 'Klimaportal' hosted by the Information Centre on adaptation 'Videncenter'. In particular, data from DMU will be channelled via the secretariat; and data provision by other institutions, such as DMI, might be facilitated by the secretariat. [Note: The modalities of channelling data from other institutions need to be further elaborated.]

*Newsletters:* A regular Newsletter (at least every three months) will be drafted and distributed by secretariat. The newsletter summaries activities by the secretariat, updates on selected ongoing research activities, informs on key national and international developments in the area of climate adaptation research, reports on working groups and other activities initiated by the unit, etc.

In addition, *other outcomes* may result from the unit's activities. Such other products and outcome may include a Conference in 2009 (before the COP, or a side-event to COP or a major conference – utilising the Adaptation Research Network), input to other cross-cutting reports (e.g. the Miljøtilstandsrapport 2009), input to international assessments (e.g. as prepared by the IPCC, OECD, EEA) other dedicated background reports (e.g. a report on Danish adaptation research in the run up to COP 2009).



#### **Steering Committee members**

Leo Larsen, Chairperson, *Managing, Director*, Sund & Bælt Lars Moseholm, *Head of KFT Secretariat*, National Environmental Research Institute at the University of Aarhus (NERI) Ellen Magrethe Basse, *Professor*, Aarhus University (AU) Anne Mette Jørgensen, *Head og Division*, Denmark's Meteorological Institute (DMI) Bjørn K. Jensen, *Deputy Director General*, Geological Survey of Denmark and Greenland (GEUS) Svend Christensen, *Head of Department*, University of Copenhagen, KU Niels Axel Nielsen, *Director*, Denmark's Technical University (DTU) Anton Beck, *Head of Department* Climate Ministry Helge Andreasen, *Head of Department* Environment Ministry Peter Sloth, *Head of Centre* Research Ministry

#### **KFT Secretariat members**

Lars Moseholm, Head of KFT Secretariat, NERI Svend Binnerup, Senior Science Advisor, NERI Lilian van der Bijl, Senior Science Advisor, NERI Bent Andersen, Senior Science Advisor, NERI Karen Grothe Villholth, Senior Science Advisor, GEUS Martin Drews, Senior Science Advisor, DMI Niels Larsen, Senior Science Advisor DMI Iben Frøkjær Strand, Senior Science Advisor, DTU Vibeke Nellemann, Senior Science Advisor, KU Berit Charlotte Kaae, Senior Science Advisor, KU Karin Madsen, secretarial support, NERI

### Scientific Advisory Group members

Jens Hesselbjerg Christensen, DMI (Head of programme climate) Erik Buch, DMI (Head of Centre climate and oceanography) Karen Edelvang, GEUS (Director of Research Department coastal areas) Ole Hededal, DTU (Associate Professor civil engineering) Niels-Jørgen Aagaard, Aalborg University (Research Director construction) Ellen Kathrine Hansen, AU (Associate Professor architecture) Mogens Henze, DTU (Professor water management) Jens Christian Refsgaard, GEUS (Professor hydrology) Marina Bergen Jensen, KU (Senior Scientist water resources) Frits Møller Andersen, DTU (Head of Programme energy) Jørgen E. Olesen, AU (Professor agriculture) John R. Porter, KU (Professor food systems) Jørgen Bo Larsen, KU (Professor forestry) Brian MacKenzie, DTU (Professor fisheries) Jens-Christian Svenning, AU (Associate Professor ecology) Anette Reenberg, KU, (Professor land use) Kåre Mølbak, Statens Seruminstitut (Head of department health) Anders Dalsgaard, KU (Professor health) Mikael Skou Andersen, NERI (Professor economics) Peder Andersen, KU (Head of Department economics) Kirsten Halsnæs, DTU (Senior Scientist economics) Brigitte Egelund Olsen, AU (Professor law) Peter Kjærgaard, AU (Associate Professor social sciences)