# "Joint Programming initiative on climate: providing scientific knowledge for the benefit of society"

Special session at Science for the Environment 2<sup>nd</sup> international conference Aarhus Denmark4<sup>th</sup> October 2013, 9:00-10:40, Auditorium 5 (William Scharff)

To pool national research efforts in order to make better use of Europe's public R&D resources and to tackle common European challenges more effectively in a few key areas – structured and strategic process launched in July 2008

#### **Draft JPI Climate Vision Statement**

A common vision to support implementation:

Connecting climate research and knowledge across Europe to better support and respond to the needs for societal innovation and sustainable development

#### **Delivering the visions**

Facilitate the coordination, collaboration and exploitation of synergies across the European research base by providing the platform to align national research priorities according to a jointly agreed Strategic Research Agenda and to inform initiatives at the European level.



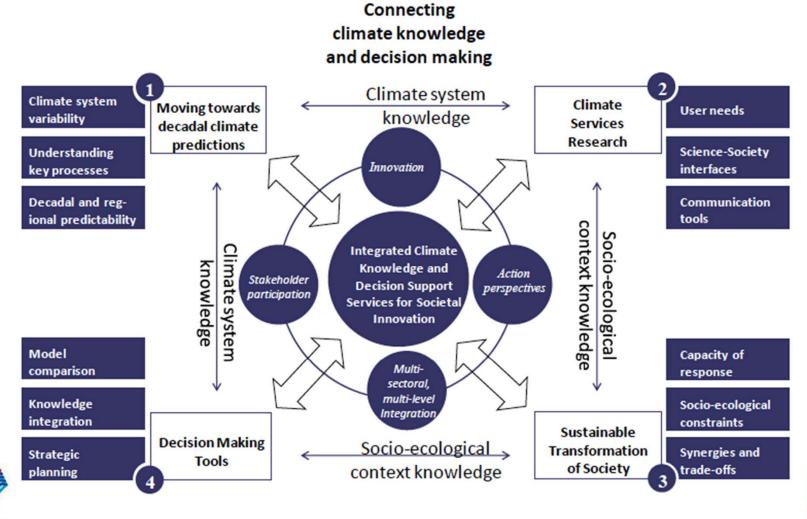








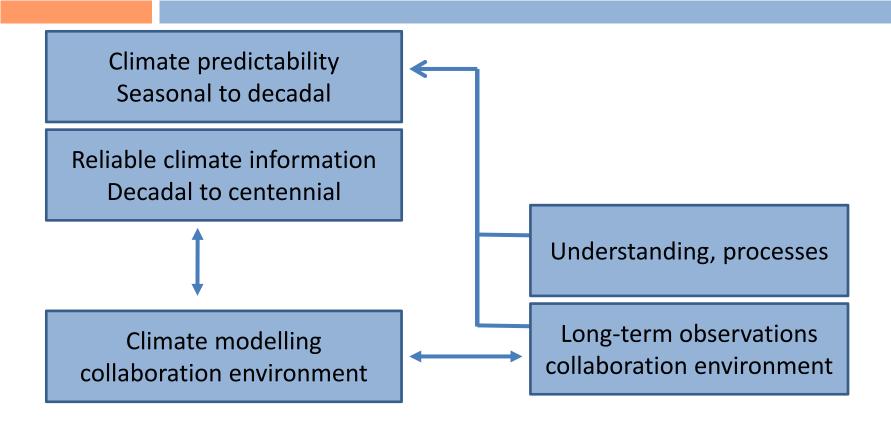
# JPI CLIMATE: http://www.jpi-climate.eu/



COOPERATION



# Module 1: Moving towards reliable decadal prediction



#### Common long-term objectives:

- Coordination of climate model development and modelling activities
- Coordination of climate observations

### Module 1: Moving towards reliable decadal prediction

#### Aims:

- Strengthen coordination of climate observations and climate modelling
- •Through improved knowledge, provide enhanced climate information and prediction capacities for Europe

<u>Achieved so far</u>: FTAs – Decadal prediction; Towards a European strategy for climate modelling; Changing cryosphere (observation to modelling; and Training in climate system science

Joint call – Russian Arctic and Boreal Systems

White papers: Reducing uncertainties in climate processes for seasonal to decadal climate prediction; and Towards a European strategy for climate modelling

<u>Challenges</u>: Providing reliable climate information to support adaptation and mitigation policies

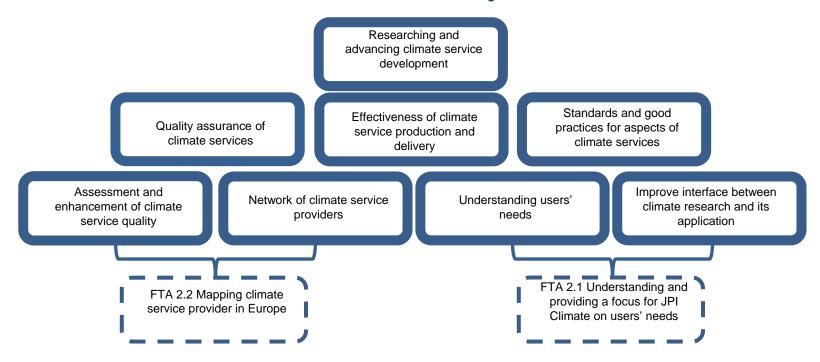
#### **Contact of the Chair:**

Sylvie Joussaume, AllEnvi (Research Alliance for Environment), <a href="mailto:sylvie.joussaume@lsce.ipsl.fr">sylvie.joussaume@lsce.ipsl.fr</a>
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### Module 2: Researching and Advancing Climate Service Development

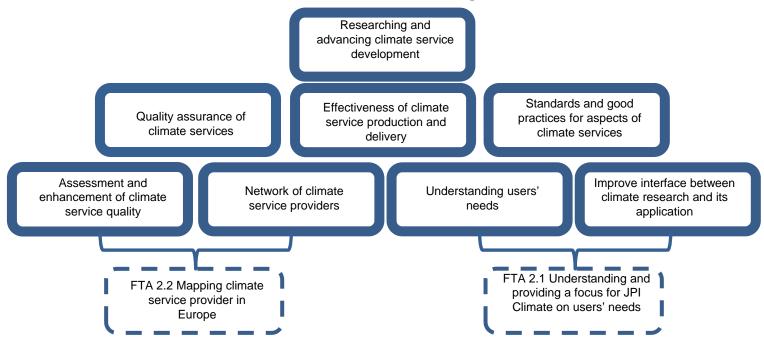


<u>Aim</u>: Module 2 focuses on researching and advancing Climate Services (CS) by establishing a climate service community, assessing the quality of CS, improving its effectiveness and efficiency and developing and disseminating good practices. Priority is seen in understanding users needs and improving the interface between Climate research and its application.





### Module 2: Researching and Advancing Climate Service Development



<u>Achieved so far</u>: FTAs (Mapping of providers, Overview of user requirements), several National Dialogues and developing research proposal "Science in support of Climate Services"

COOPERATION

<u>Challenges</u>: Engaging the climate services community (users and providers) and the broad community required; the increasing complexity of the climate services community, including diversity of activities and governance within EU and internationally

**Contact of the Chair**: Dr. Dagmar Bley (dagmar.bley@dlr.de)

**About** 

# Module 3: Sustainable transformations of society in the face of climate change

#### Aims:

- •Create a European research community within SSH research on climate change, with a view to facilitate excellent science in Europe
- •Tie research and society closer together by creating common visions and common agendas, facilitate the dialogue

Achieved so far: community building and agenda setting, white paper, joint call

**Challenges**: linking science and society

#### **Contact of the Chair:**

Lisa Almesjö, Swedish Research Council Formas, <a href="mailto:lisa.almesjo@formas.se">lisa.almesjo@formas.se</a>
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# Module 3: Sustainable transformations of society in the face of climate change

#### **Objectives**

### Understanding societal transformations

in the face of climate change: sustainable pathways, visions, and governance

### Understanding the systemic dimension of climate change:

socio-ecological and socio-economic limits, opportunities and trade-offs of mitigation and adaptation strategies

### Understanding the social dimension of climate change:

societal barriers and incentives for adaptive and mitigative responses, role of climate knowledge in decision making

#### Research Priority Fields

Transformation studies and scenarios

Sustainable responses to climate change

Governance of sustainable transformations

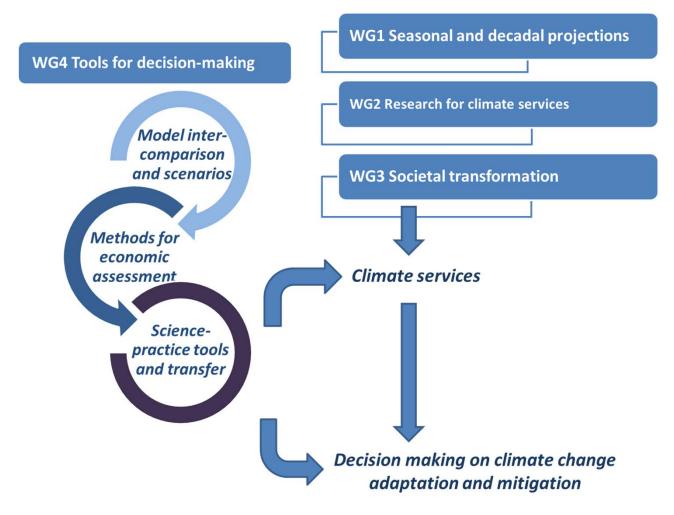
Societal capacity to respond to climate change





# Module 4: Improving climate change decision-making support methods and tool

Connecting complex scientific knowledge to decision-making requires practice-oriented methods



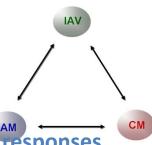




# Module 4: Improving climate change decision-making support methods and tool

#### (a) Climate impact model inter-comparison for integrated scenario development.

- Integrated articulation of knowledge for practical value.
- IAV research still rather fragmented: ISI-MIP
- Wider framework for consistent interpretation of regional, context-specific knowledge



#### (b) Methods for economic assessment of climate change and responses.

- Complete picture of cost, risks, opportunities of various climate futures.
- Much research on mitigation, little on impacts and adaptation.
- Climate economics research agenda in a JPI context / link to H2020.

#### (c) Science-practice tools and knowledge transfer.

- Create venues for effective science-practice interaction
- Experimental settings for co-development of effective methods and tools
- common learning environments



Contact of the Chair: Gregor Laumann, gregor.laumann@dlr.de

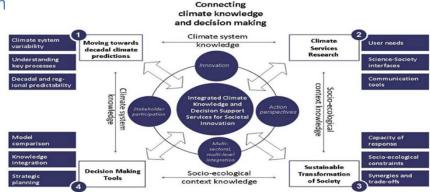


### **Delivering JPI CLIMATE: The role of integration**

<u>Aim</u>: Realising the potential of JPI Climate by providing opportunities for knowledge exchange and coordinated research across the modules to more effectively deliver the vision. Implementation of the SRA will require integration at various levels:

Thematic modules (1st level of integration)
Integration between Modules (2nd level of integration

- Integrated socio-economic policy and response analysis
- Integration of observations, models and tools Cross-cutting integration (3<sup>rd</sup> level of integration)
- Integrated quality climate services
- Integrated hot-spots or sector studies
- Science-practice labs



<u>Achieved so far</u>: Draft Implementation Plan, including implementation instruments, being developed. Will be presented to the JPI Climate Governing Board in December 2013 and to be updated annually

<u>Challenges</u>: Integration is a challenge, including identifying and implementing the appropriate instruments to deliver that integration (e.g., exploration and assessment; joint strategy papers, aligning of activities and joint calls)



#### **Task Leader:**

Roger B Street (roger.street@ukcip.org.uk)



### **QUESTIONS FROM THE AUDIENCE**

http://www.jpi-climate.eu/jointactions/calltransnationalcollaborativeresearchproje
cts





### **Seeking Input and Feedback**

- 1. What do you see as challenges associated with making the policy-science interface work translating and mobilising knowledge?
- 2. Suggestions as to how to address these challenges, including lessons learnt.
- 3. What do you believe are the barriers and challenges associated with transnational collaborative research?
- 4. How can JPI-Climate address these barriers and challenges?



