

FACT SHEET INNOVA PROJECT

Wim Timmermans, Fokke de Jong

Project leader: dr. Wim Timmermans.

Start project: -1-10-2017

End project: 30-09-2020

Budget WENR: 297ke.

Partners research:

- Helmholtz-Zentrum Geesthacht Zentrum für Material- und Küstenforschung GmbH, Germany
- Ecologic institut gemeinnützige GmbH, Germany
- Universitat politecnica de Valencia, Spain
- Universite des Antilles, France
- Wageningen Environmental Research, Wageningen UR, The Netherlands

Partners Stakeholders:

- Municipality Kiel
- Municipality Valencia
- Municipality Guadeloupe
- Municipality Nijmegen

Summary:

In order to help society manage the impacts of climatic changes and find innovative climate risk management solutions, we propose the project INNOVA: Innovation for Climate Services Provision. The primary objectives of INNOVA are: 1) the co-development of innovative solutions to transform climate risks into opportunities actively engaging a variety of stakeholders, including entrepreneurs, companies, public bodies, experts, and other talented professionals; and 2) the identification of measures for evaluating and monitoring, up-scaling, and replicating efficient current and future innovative climate services for decision making on managing climate risks taking into account their added value. The project aims to consolidate knowledge from leading earlier and on-going European initiatives and to distil specific complementary climate services essential for the enhancement and adoption of innovative solutions to support climate risk management. The project follows the broad definition of the European Roadmap for Climate Services going beyond simple descriptive analyses of climate risk management efforts supported by climate data on observations and projections and will provide prototypes including viable business models and practical innovation frameworks, and recommendations for creating and up-scaling opportunities through adaptive co-management approaches. Speeding up social and

technological actions for climate risk management and generating opportunities are fundamental for solving the Europe's societal challenge of climate change.

Key words: metropolitan, climate adaptation, economic benefit, stakeholders, evidence based design.

INNOVA is an EU funded research project under the "European Research Area for Climate Services" (www.ERA4CS.eu) program which was launched in 2016. Complementary with other EU research programs as H2020, Climate Kic and others (figure 1) ERA4CS has its own position in Climate services research. ERA4CS aims to boost national and European CS research at the interface between user communities and climate service science. INNOVA, within ERA4CS, focusses on long term urban scenarios for climate adaptation including economic benefits and stakeholder participation.

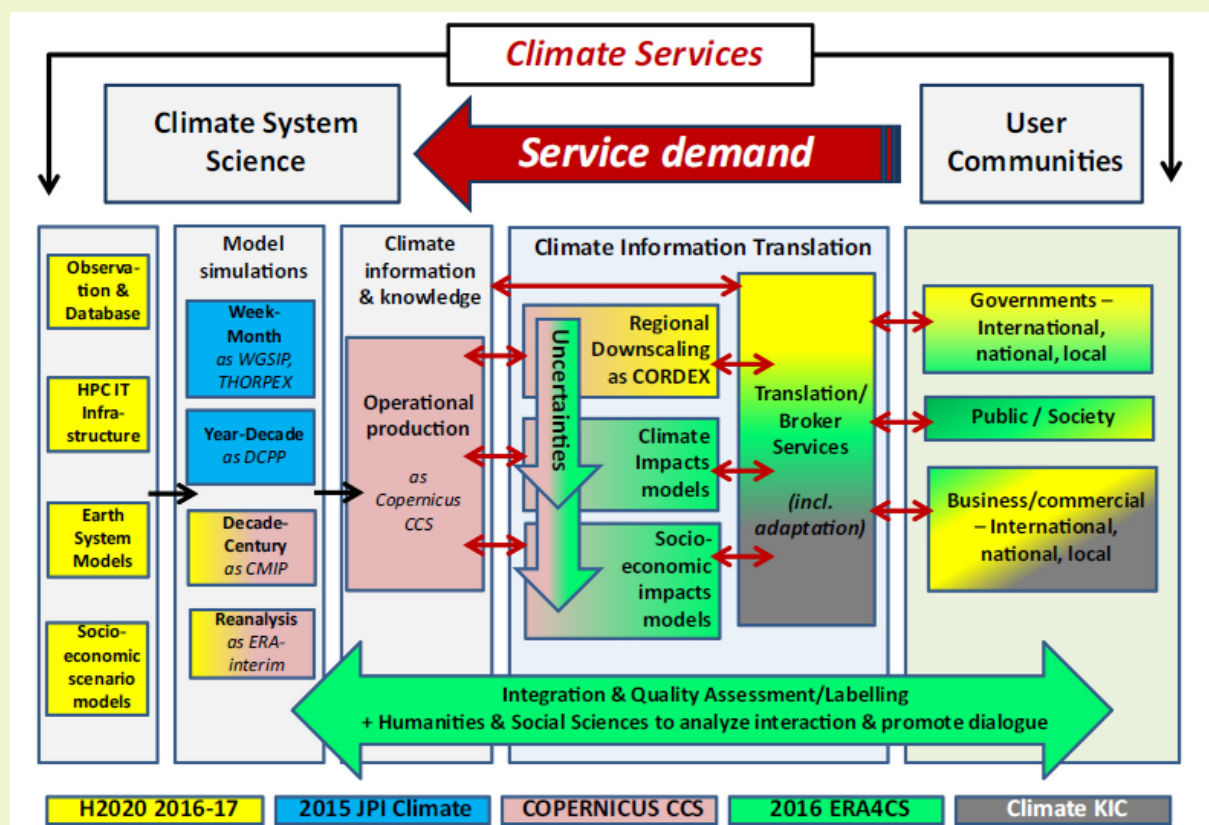


Figure 1. Simplified Climate Service Landscape in Europe for the period 2015 – 2017. The main focus of the ERA4CS call is displayed in green, and is related to complementary roles of other main European initiatives (H2020, JPI Climate, Copernicus Climate Change Service and Climate KIC).



Innovation in Climate Services Provision

INNOVA helps the **society** managing the impacts of climatic change and finding **innovative** climate risk management **solutions**, and extreme risk response options. This project emphasis on cutting-edge climate services research by a combination of social and economic innovation.



Indicator	
Ice days	(17)
Heavy precipitation days	(17)
Population	(15)
Consecutive dry days	(14)
Consecutive wet days	(13)
Very heavy precipitation days	(13)
Gross domestic product (GDP)	(12)
Frost days	(10)
Changes in Heating degree-days	(10)
Number of wet days	(10)

By monitoring the performance, effectiveness and scalability of the INNOVA approaches, the project contributes in an innovative way to understanding the key role of **business models** and performance monitoring, in enhancing adaptation innovation, market uptake and replicability of climate services, and in the end it can contribute to generate **employment** opportunities and sustainable growth.



The direct engagement of a broad range of relevant **stakeholders** that co-develop climate and risk management strategies in key economic sectors will ensure upscaling and uptake of the project outputs.

INNOVA is designed to build on proven innovation frameworks, called "innovation hubs", connected across the project and to the wider world (Mediterranean, North European and islands; urban and peri-urban areas) through the various networks in which the hub-partners are involved. These hubs have been chosen based on areas in Europe that were identified as highly likely to be vulnerable in the IPCC 2014 findings, and including one location in the less outermost regions of Europe. In each real-world innovation hub, three groups of people work together on



innovative solutions to real problems: societal actors (private sector, citizen groups); public sector (government) & knowledge brokers.



Hub Kiel Bay is a low-lying area at the Baltic coast of Schleswig-Holstein (Germany). Surrounding the Eckernfoerde Bay and Kiel fjord, it consists of smaller communities (with main focus on coastal tourism) and the states capital Kiel City (with a multi-sectoral structure) is affected by erosion and heavy rains.



Hub Valencia region consisting of a metropolitan area suffering from droughts and with a multi-sectoral structure in which irrigated agriculture plays an important role in the consumption of water (around 80% of the resource).



The Dutch hub Nijmegen is part of the Covenant of Mayors/Mayors Adapt network integrating the national Room for the River program with a major urban development project and many small-scale co-creation efforts. Recurrent floods and droughts might affect heavily the area.



French West Indies hub: local economy is much precarious, depending on natural risks such as earthquakes and climate hazards. Decreased rains, severe flash floods, droughts and increasing temperatures contribute to damaging the agriculture sector impacting the local economy for which it remains a key sector in Guadeloupe and Martinique.

The consortium has an excellent track record in user-driven services, innovation support and engagement with multiple stakeholders. It is well positioned to bridge the gap that often exists between users and providers of climate services.





Actions WENR 2018:

1. Evaluation of Nijmegen Embraces the Waal project. Book presentation October 2018 at Nijmegen Green Capital 2018 event (to be decided).
2. Two long term metropolitan scenarios (Nijmegen, October 2018; Valencia, p.m.)
3. Plan for 10 e-zines with Blauwdruk Publishers. 3 published and distributed in 2018.