



## **EVOKED – communication of climate services using Living Labs**

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EVOKED is a three-year collaborative research project starting in 2017 funded via the JPI Climate and European Research Arena for Climate Services programs. The project team is composed of 9 organisations from 4 European countries, including end-user partners from local and regional administrative units in Norway, Sweden, the Netherlands and Germany.

Climate services are defined as the transformation of climate products in relation to climate that may be of use for the society at large. They are recognized as an important part of improving our capacity to manage climate-related risks. The problem facing end-users is not a "lack of knowledge", but rather (i) knowing which knowledge to use and when, as well as (ii) knowing how to deal with risks and uncertainties related to different types of climate knowledge. There is a need to engage knowledge providers, users, and translators to identify improvements to climate services through co-design, co-development, co-evaluation and co-validation. EVOKED aims to address this challenge by re-framing the risk and uncertainty associated with climate data into knowledge products more understandable and useful for end-users concerned with risk mitigation and adaptation. This enhances the value of data the scientific community produces for end-users and for decisions related to adaptation planning.

The project team will engage end-users in a Living Labs approach to ensure a user-contribution innovation methodology at established case study sites in Norway, Sweden, Germany and the Netherlands. The Living Lab methodology has emerged in recent years as a form of experimental and potentially inclusive mode of urban planning. The scope and character can vary depending on the issue at hand, the institutional level and the scope of the problem. The general idea is to involve a range of committed stakeholders in a real-life "laboratory" setting to test and develop alternative solutions for complex challenges, such as climate adaptation or risk and uncertainty assessments.

The first step in moving from information to service is a co-design process with users. In the context of user-driven provision knowledge for understanding climate change and its impacts, this means framing risks and uncertainties within communities to identify the scope of these challenges. This is important as there are many different definitions of risk and understandings of risk. For example, epistemic risk can be defined as expert generated risk and consensual risk defined as experience-based risk. Risk is also context dependent and the different ways of representing risk, vulnerability, resilience and uncertainty can be confusing for end-users. Understanding the local perceptions of risk is necessary before it is possible to communicate risk. EVOKED therefore encourages end-users to share their perceptions of risk and uncertainty, and identify which data or forecasts evokes action towards climate adaptation. This involvement serves as a mechanism for improving our capacity to manage climate-related risks. Thus, EVOKED supports the development of the field of climate services to translate existing climate knowledge into useful products for practitioners and the implementation of climate adaptation measures.