

## **Climate local information in the Mediterranean region: Responding to user needs - CLIMRUN**

Paolo Michele Ruti<sup>†</sup>; CLIMRUN WPs Leaders team CLIMRUN WPs Leaders team

<sup>†</sup> ENEA, Italy

Leading author: [paolo.ruti@enea.it](mailto:paolo.ruti@enea.it)

CLIM-RUN aims at developing a protocol for applying new methodologies and improved modeling and downscaling tools for the provision of adequate climate information at regional to local scale that is relevant to and usable by different sectors of society (policymakers, industry, cities, etc.). Differently from current approaches, CLIM-RUN will develop a bottom-up protocol directly involving stakeholders early in the process with the aim of identifying well defined needs at the regional to local scale. The improved modeling and downscaling tools will then be used to optimally respond to these specific needs. The protocol is assessed by application to relevant case studies involving interdependent sectors, primarily tourism and energy, and natural hazards (wild fires) for representative target areas (mountainous regions, coastal areas, islands). The region of interest for the project is the Greater Mediterranean area, which is particularly important for two reasons. First, the Mediterranean is a recognized climate change hot-spot, i.e. a region particularly sensitive and vulnerable to global warming. Second, while a number of countries in Central and Northern Europe have already in place well developed climate service networks (e.g. the United Kingdom and Germany), no such network is available in the Mediterranean. CLIM-RUN is thus also intended to provide the seed for the formation of a Mediterranean basin-side climate service network which would eventually converge into a pan-European network. The general time horizon of interest for the project is the future period 2010-2050, a time horizon that encompasses the contributions of both inter-decadal variability and greenhouse-forced climate change. In particular, this time horizon places CLIM-RUN within the context of a new emerging area of research, that of decadal prediction, which will provide a strong potential for novel research. However, the specific temporal scales considered in the project will be dictated by the stakeholder needs for the specific case studies and will be assessed early in the process. As a result, shorter or longer temporal scales could be addressed, as needed. A final outcome of CLIM-RUN will be a new and generally applicable systematic bottom-up protocol for the assessment and management of climate-related risk. It will also contribute to the development, and provision of training for, a new scientific expertise which lies at the interface of science and stakeholder application. CLIM-RUN will have strong links with ongoing or recently completed EU projects (ENSEMBLES, CIRCE, DeSurvey, ACQWA, CECILIA) as well as new international programs (CMIP5, CORDEX). Specific tools and methods will be provided to local stakeholders and one outcome of the project will be the creation of a Mediterranean network of climate services users. CLIM-RUN will thus act as intermediary between data users (both public and private) and data providers.