



## **Title: URCLIM project: development of the Urban Climate Services**

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A general description of the newly funded project URCLIM. The goal of the project is to prove a concept: the realization of integrated Urban Climate Services (UCS) for urban planners and related stakeholders using open urban data and regional climate data.

While already just over 50% of the world population lives in cities, it is expected that on balance practically all population growth up to 2050 is in cities, for approx. 6.5 billion in total. Cities are particularly vulnerable to climate change, because of the concentration of population, goods, capital stock, and infrastructures. Furthermore, cities are a main emitter of greenhouse-gases, as the high concentration of human activities, like transport and industry, entails high levels of energy consumption. Therefore, city actors, especially planners, are facing numerous and sizeable climate change related challenges, while having to manage and plan their city development in a sustainable and climate proof way. In such a complex multi-dimensional and multi-objective decision environment pertinent and clear, decision relevant information is indispensable for urban planners and related stakeholders. However climate information is mostly provided by climate models at spatial scales much larger than the (sub) urban scales at which mitigation and adaptation measures are to be realized. The ambition of the URCLIM project is to advance significantly on Urban Climate Services (UCS), for urban planners and related stakeholders using open urban data and regional climate data. In order to realize this goal, the project has 4 scientific objectives : 1) To develop a methodology for the creation of high resolution maps of urban parameters for climate studies 2) To analyse the propagation of uncertainty from regional climate models to urban scale climate models and local impact models, 3) To evaluate multi-criteria impacts and various types of adaptation strategies, 4) To define pertinent Urban Climate Services in cooperation with stakeholders, and using a visualization interface. Several case studies will also be chosen, each located in a different climate, influenced by different geographical features, and with a different urban history and structure.