

Scientific-Technical Phase 4, June 2024 - Executive Summary

From January 1 to June 30, 2024, the SynUHI project (Improving the adaptive capacity of cities to the impact of climate change on urban heat island and heat wave relationships) aimed to achieve the following deliverables (1) Report on the adaptive capacity of cities in Romania to climate change, (2) The inventory of nature-based solutions for the adaptation of Romanian cities to climate change, and (3) The development of a set of support tools for the adaptation of urban systems to climate change, including methodologies for studying the synergy between waves of heat and the urban heat island, as well as a Web-GIS platform. All three deliverables initiated in this stage will be finalized in the next (final) stage of the project.

The report on the adaptation capacity of Romanian cities to climate change (D12) includes a brief presentation of adaptation strategies at the European and national level, defines the adaptation capacity and proposes indicators for its evaluation in urban areas in Romania. Also, different methodologies for evaluating the urban adaptation capacity to climate change were analyzed. Also at this stage, an inventory of nature-based solutions for the adaptation of Romanian cities to climate change (D13) was developed, including the synthetic analysis of nature-based solutions as a tool for climate change adaptation, and their implementation in Romanian cities. Also, a Web-GIS platform was created that integrates a set of support tools for the adaptation of urban systems to climate change, including methodologies for studying the synergy between heat waves and the urban heat island (D14). The platform allows for the multi-criteria evaluation of the adaptation capacity of cities to the stress caused by heat waves, and the conceptual framework that will be available in the SynUHI platform for users and decision-makers has been created.

Obtained results were presented orally in 3 communications held at international scientific events. A scientific article has been submitted for publication and a scientific article has been published.