

Scientific-Technical Phase 5, December 2024 - Executive Summary

From July 1 to December 31, 2024, the SynUHI project (Improving the Adaptation Capacity of Cities to the Impact of Climate Change on the Relationship Between Urban Heat Island and Heatwaves) aimed to produce the following deliverables: (1) a Report on the Adaptation Capacity of Cities in Romania to Climate Change, (2) an Inventory of Nature-Based Solutions for Adapting Romanian Cities to Climate Change, (3) Development of a set of support tools for adapting urban systems to climate change, including methodologies for studying the synergy between heatwaves and the urban heat island effect, as well as a Web-GIS platform, (4) Finalization of the integrated database.

The Report on the Adaptation Capacity of Cities in Romania to Climate Change (D12) provides a brief overview of adaptation strategies at the European and national levels, defines adaptation capacity, and proposes indicators for evaluating this capacity in urban areas in Romania. It also analyzes various methodologies for assessing urban adaptation capacity to climate change. In this phase, an inventory of nature-based solutions for adapting Romanian cities to climate change (D13) was developed, including a synthetic analysis of nature-based solutions as a tool for climate change adaptation and their implementation in Romanian cities. Furthermore, a Web-GIS platform was created to integrate a set of support tools for adapting urban systems to climate change, including methodologies for studying the synergy between heatwaves and the urban heat island effect (D14). This platform enables multi-criteria evaluation of cities' adaptation capacity to the stress caused by heatwaves and provides a conceptual framework that will be available on the SynUHI platform for users and decision-makers.