

Pre-feasibility study for green roofs, green facades and de-sealing of surfaces

Potential Climate/ Disaster Impacts addressed and Justification for this Approach

Climate monitoring and assessment show that extreme weather events are becoming more frequent and intense in Montenegro. The city of Podgorica is particularly exposed to heatwaves and urban biodiversity is being significantly impacted, which hampers its capacity to provide ecosystem services. Green roofs have been identified as a relevant measure against the heat island effect that would support the city's Climate Adaptation Strategy and Biodiversity Action Plan. Combining this measure with green facades, painting roofs and facades with light colours and de-sealing surfaces is another urban adaptation option.

Process of Implementation

After shortlisting the city, the Gap Fund conducted a detailed assessment that was approved by the TS. The team prepared a ToR with the city and later on, the TA was implemented and supervised by the GF team. Throughout the process, all relevant stakeholders were engaged.

Project Title

Support for Project Preparation for Urban Progress (SuPPUrbP) - City Climate Finance Gap Fund

Project Number

20.9118.9-001

Results and Impacts

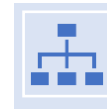
Development of a pre-feasibility study, including: 1) screening and selection of 3-5 public buildings that may be selected as pilot cases, 2) identification of 3-5 potential areas for de-sealing surfaces that could be selected as pilot cases (only two will be further analysed), and considering the following aspects: a) expected investment and maintenance costs for individual projects, b) technical feasibility, including structural engineering considerations, c) structural risks of the buildings and potential mitigation strategy, d) expected benefits (energy efficiency, cost savings in heating and cooling, absorption of rainfall, reduction of heat island effects, etc.), 4) provision of additional recommendations to facilitate the implementation of the municipal Climate Adaptation Strategy.



TYPE OF APPROACH
Framework conditions



COUNTRY
Montenegro



LEVEL OF INTERVENTION
city



TYPE OF RISK MANAGEMENT
prevention, resistance



MAIN HAZARDS ADDRESSED
Heat Wave



URBAN FUNCTION PROTECTED
Economic opportunities/ jobs / work environment



SPHERE OF INTERVENTION
environment



RESOURCES REQUIRED
2 Key experts, 20 working days + 3 non-key experts, 20 working days; consulting contract



COOPERATION PARTNERS
Municipality of Podgorica, Contracting Authority