CONSORTIUM





















PROBLEM TARGETED

SOLUTION PROPOSED

LIFE SUPERHERO BENEFITS

Extreme climate events have considerably increased in recent years. This clearly indicates that climate change is already a reality and its impacts will most probably challenge the quality of life in our cities.

EU cities are projected to grow from housing nearly 73% of the population now to more than 80% by 2050.

Urban Heat Island (UHI), the phenomenon resulting in the increase of temperature in dense areas of cities in comparison with rural areas, is then exacerbating too.

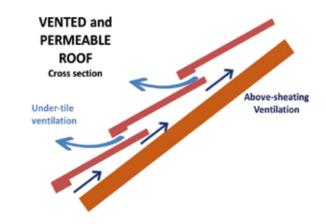


The combination of these two important phenomena will result in the coming decades in ever higher temperatures inside buildings, especially in existing ones with poor energy levels. Consequently, comfort and health problems will especially occur for weak and disadvantaged groups (elderly and sick).

An effective, sustainable and low-cost answer to cities and buildings overheating is using building "passive cooling" technologies, which allow to reduce the temperatures of buildings envelope (roofs and walls) and consequently of the surrounding air (thus limiting Urban Heat Island), rather than increase energy demands from artificial cooling.

The use of Ventilated and Permeable Roofs (VPR) is the most sustainable and promising strategy.

The "HEROTILES" developed under previous LIFE HEROTILE project even have an improved cooling ability compared to another roof technologies.





Standard and regulations proposal:

The production of a standardised air permeability test method, the proposal of updating buildings green rating systems and public procurement including VPR environmental benefits, the proposal of improving existing CEN standards in order to include VPR into building energy calculation.



Best practice with municipalities:

The development of guidelines on proper roof renovation strategies to be used as climate solutions.



Development of a **SUPERHERO** software tool:

A decision support tool for building consultants and public administrations in order to select the best design solutions for their projects and climate plans.



Industrial replicability and transferability:

This action will amplify the climate impacts obtained by the project, and will involve all partners, especially the tile & brick industries and associations.