

# life SUPERHERO

## Sustainability and PERformances for HEROTILE-based energy efficient roofs

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## PROBLEM TARGETED

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.

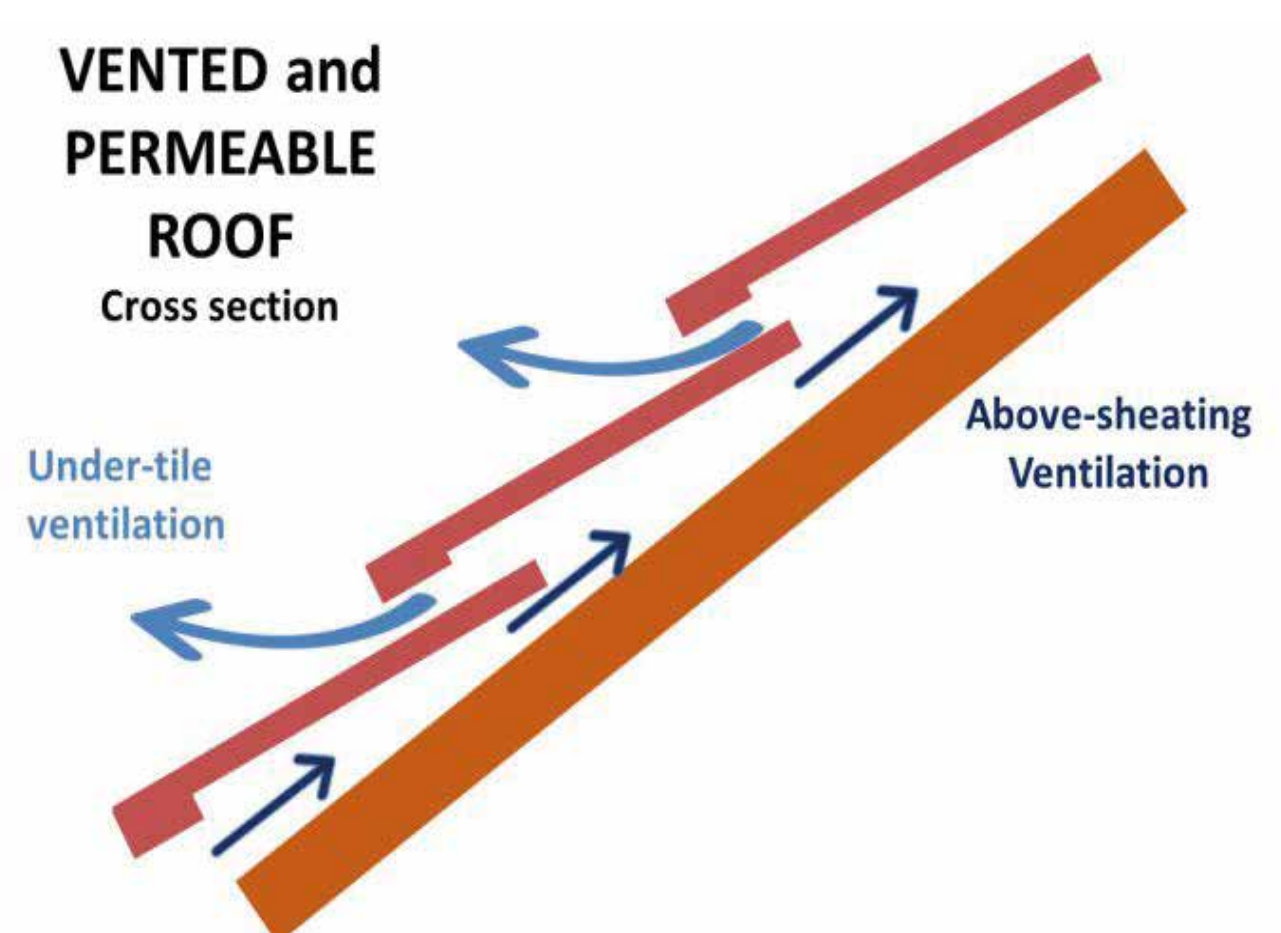
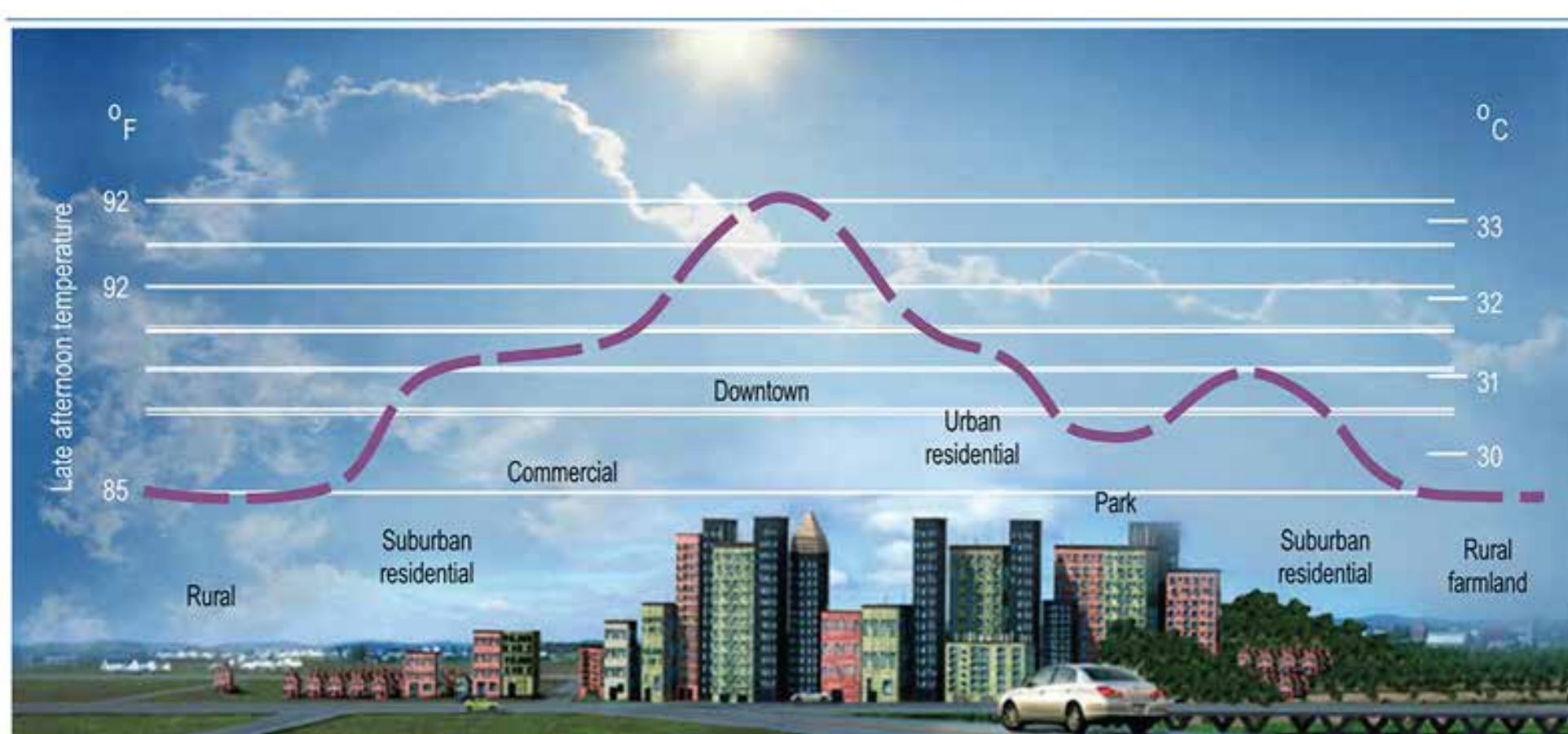
Urban Heat Island (UHI), the phenomenon resulting in the increase of temperature in dense areas of cities in comparison with rural areas, is then exacerbating too.

## SOLUTION PROPOSED

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.



## LIFE SUPERHERO BENEFITS



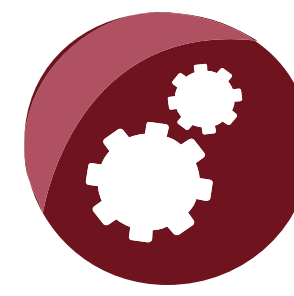
### Standard and regulations proposal:

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.



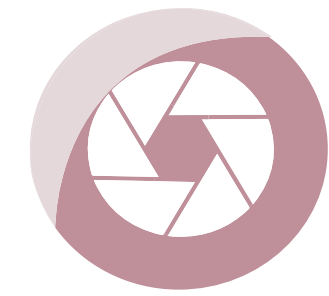
### Best practice with municipalities:

To develop guidelines on proper roof renovation strategies to be used as climate solutions. HBR will be installed on two buildings in Reggio Emilia, demonstrating its easy and cost-effective realization, while entailing high energy and environmental performance.



### Development of a SUPERHERO software tool:

A decision support tool for building consultants and public administrations, to assess life-cycle environmental and economic benefits of VPR and HBR, in order to select the best design solutions for their projects and climate plans.



### Industrial replicability and transferability:

This action will set the basis for a strong market penetration of VPR and HBR, thus amplifying the climate impacts obtained by the project, and will involve all partners, especially the tile & brick industries and associations.

### MORE INFO:

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### PROJECT DETAILS:

>PROJECT TITLE: Sustainability and PERformances for HEROTILE-based energy efficient roofs  
>START DATE: 01/07/2020  
>END DATE: 30/06/2025  
>TOPIC: Climate Change Adaptation  
>SECTOR: Urban adaptation/planning  
>EU CONTRIBUTION: 1,563,160 Euro