



REGIONAL FORUM ON SUSTAINABLE DEVELOPMENT: ADAPTATION TO CLIMATE CHANGE

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EU AFFAIRS
AND **PROJECTS**



1. The European strategy for adaptation to climate change



Germany/Belgium 2021

Policy context

- The **2030 Agenda for Sustainable Development**
- the **Paris Agreement**
- The **European Green Deal**:
 - European **Climate Law**,
 - European **Climate Pact**
 - **Farm to fork** strategy
 - Renewed **sustainable finance** strategy
 - ... and more!
 - **2030 Climate** Target Plan
 - EU **Biodiversity** strategy
 - **Forest** strategy



A new EU strategy on climate adaptation

“Forging a climate-resilient Europe - The new EU strategy on adaptation to climate change”

Adopted by European Commission on 24 February 2021

- Evaluation of the first strategy (2018)
- Blueprint, open public consultation, and expert reviews (2020)



Vision & Objectives

- Vision: by 2050 the EU will be a climate-resilient society, fully adapted to the unavoidable impacts of climate change
- Objectives:
 - **Smarter adaptation** – improving knowledge and managing uncertainty
 - **More systemic adaptation** – support policy development at all levels and sectors
 - **Faster adaptation** – speeding up adaptation across the board
 - **Stepping up international action** for climate resilience



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Smarter adaptation

improving knowledge and managing uncertainty, by

- Pushing the frontiers of **knowledge** on adaptation
- More and better climate-related **risk and losses data**
- Making **Climate-ADAPT** the authoritative European platform for adaptation knowledge



© picture: NOAA

More systemic adaptation

support policy development at all levels and sectors, by:

- Improving **adaptation strategies and plans**
- Fostering **local, individual, and just resilience**
- Integrating climate resilience in **macro-fiscal policy**
- Promoting **nature-based solutions** for adaptation



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Faster adaptation

speeding up adaptation across the board, by:

- Accelerating **the rollout** of adaptation solutions
- Reducing **climate-related risk**
- Closing the **climate protection gap**
- Ensuring the **availability** and **sustainability** of **freshwater**



© picture: Peter Löffler

Stepping up international action

For climate resilience, by:

- Increasing support for **international climate resilience and preparedness**
- Scaling up **international finance** to build climate resilience
- Strengthen **global engagement** and **exchanges** on adaptation



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Engagement of EU

- Based on subsidiarity and local nature of adaptation
- Support MS, subnational authorities, business & individuals
- Financially, with knowledge & tools
- Invitation to work together



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2. Good practices from the EU LIFE Programme

LIFE Programme and climate adaptation



- Since 1992
- More than 5000 projects financed so far
- **5,4 billion euro 2021-27**



**Nature and
biodiversity:**



**Circular economy
and quality of life:**

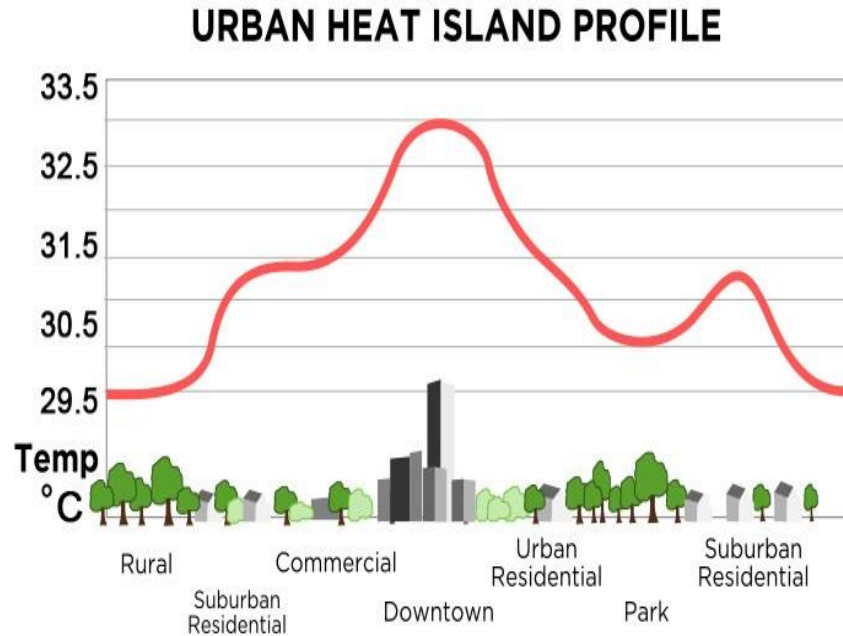


**Climate mitigation
and adaptation**



**Clean energy
transition**

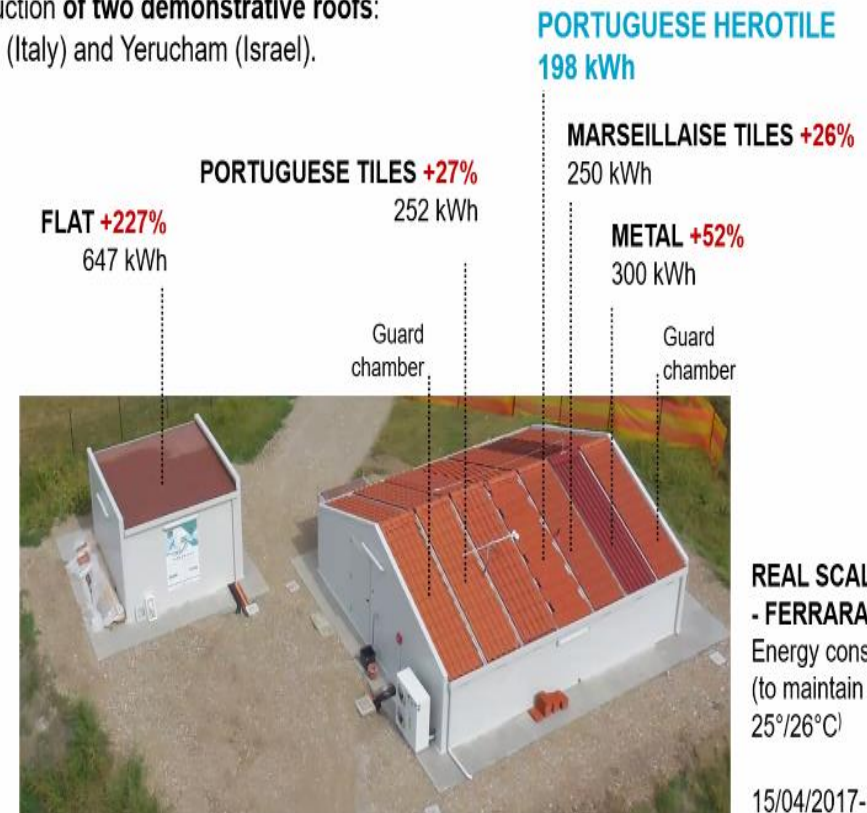
Urban Heat Island Effect – LIFE HEROTILE



- Roof Tiles that control and reduce the energy requirement for cooling, that is the major energy demand in air-conditioning
- Reduce the Urban Heat Island Effect

Life-Herotile – Action 3

Construction of two demonstrative roofs:
Ferrara (Italy) and Yerucham (Israel).



Urban Heat Island Effect – LIFE HEROTILE



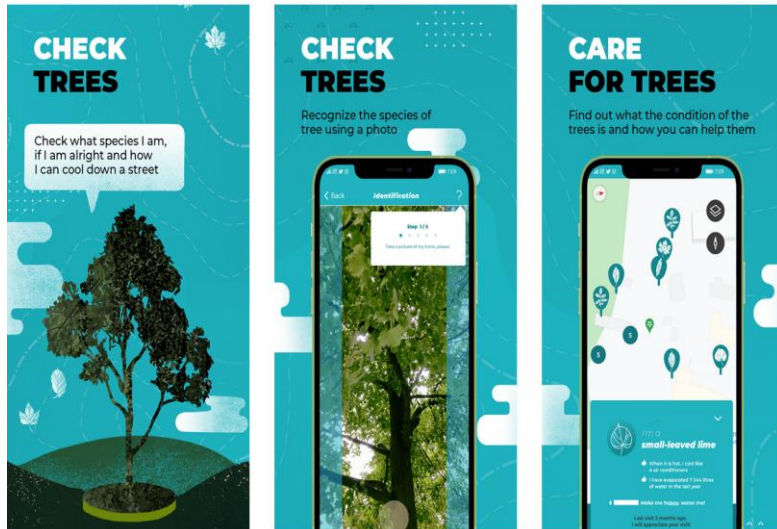
Verification of the collected data on two real buildings, one in Zaragosa (Spain) and the other in Ca' del Bosco (Italy).

-50%

Reduction of the inlet watts **to be cooled** in comparison with a non-ventilated roof



Nature based solutions- LIFE TreeCheck



LIFE Tree Check

ABOUT TREECHECK **INSPIRATION** DOCUMENTS EVENTS



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Nature-based solutions – LIFE Metro Adapt



SOLUZIONI VERDI PER L'INGEGNERIA CIVILE PER CONTRASTARE I CAMBIAMENTI CLIMATICI

By redazione | Giugno 11th, 2021 | Categories: LE ULTIME SU METRO ADAPT | 0 Comments

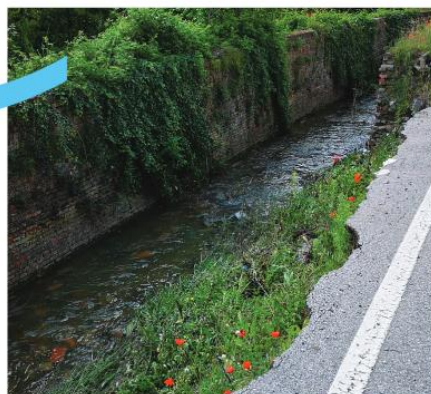
Visita all'intervento idraulico pilota realizzato a Solaro per il contenimento del rischio idraulico nell'ambito del progetto europeo Life Metro Adapt Milano, 9 Giugno 2021 - Nell'ambito del progetto LIFE Metro Adapt nato grazie al Programme for [...]



Flash floods risk management - LIFE RAINBO

- Sistema sperimentale per migliorare la risposta agli eventi improvvisi di piena

Il torrente Ravone a Bologna



Il fiume Parma a Parma



LE AZIONI

- Simulazione di scenari critici per la pianificazione e la prevenzione del rischio
- Potenziamento dell'infrastruttura di monitoraggio dei fenomeni intensi e della loro evoluzione
- Sviluppo di un sistema di early warning per le alluvioni lampo

LIFE RAINBo

- Database che raccoglie dati sulle precipitazioni e sul livello idrometrico dai sensori e dati di precipitazione stimati con una tecnologia sperimentale che sfrutta il segnale elettromagnetico in corrispondenza dei ponti radio delle infrastrutture di telecomunicazione

OFF LINE

Simulazione di scenari critici in tempo di pace

- Modelli di calcolo di vulnerabilità, mappe di pericolosità idraulica, analisi di eventi storici opportunamente mappati e integrati

Supporto per il piano di emergenza comunale

- Mappatura dettagliata dei dati territoriali, strumento di supporto per la mitigazione del rischio e per la gestione dell'emergenza

41
eventi storici

Catalogati
per le simulazioni
di scenario

2000
sensori

Integrati
nella piattaforma
per il monitoraggio

ON LINE

Monitoraggio dei fenomeni intensi

- Combinazione tra sistemi tradizionali e innovativi basati sulla tecnologia Microwave link per monitorare i fenomeni di precipitazione e la loro evoluzione

Early warning per le piene improvvise

- Modelli di simulazione idrologici sui piccoli e medi bacini e sistemi di segnalazione al superamento di soglie critiche

Desalinisation – LIFE DREAMER



To increase desalination system water recovery to 90%.



To decrease the environmental impact associated with reverse osmosis desalination by **reducing up to 80% the brine generated**.



To **reduce by 50% the chemicals used in desalination treatment** through the removal and recovery of products contained in seawater.



To **diminish the specific energy consumption of reverse osmosis desalination process by 10%**.



To **reduce greenhouse emissions generated from desaliation treatment to 10%**.

- The filtration- settlement system of the LIFE DREAMER process has managed to recover 99% of the water used and concentrating the same percentage of the solid waste generated. The filtering stream from this system is re-injected back into the main treatment system with a consequent increase in the volume of product water



Thank you



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