



# Nature for Resilient Infrastructures



The Med-IREN project combines nature-inspired solutions with engineering practices to safeguard critical infrastructures such as transport, energy, and water supply from flooding, wildfires, and other climate hazards that threaten European societies.

## MAIN OBJECTIVES:



Create a digital decision-making support toolset

Explore societal and community engagement solutions



Develop a climate risk and resilience framework

Provide in-depth assessment of  
systemic adaptation enablers  
(i.e. local governance, efficient  
urban planning)



Achieve effective management and  
NBS implementation in critical  
infrastructure

Provide a replicable  
innovative model for  
systemic transformation



## NATURE-BASED SOLUTIONS FOR RESILIENT REGIONS

Across Europe, regions face unique climate challenges, from floods and droughts to wildfires and heatwaves. Tailored Nature-Based Solutions (NBS) are being developed and implemented locally to meet the specific needs of each area.

### MAIN EXPLORED NATURE-BASED SOLUTIONS:

- Rain gardens
- Forest grazing
- Beach nourishment
- Vegetation walls
- Phytoremediation
- Urban photo-bioreactors



## EXPECTED IMPACTS:

- Contribute to the upgrade of EU strategies on climate adaptation and resilience of infrastructures
- Just and equitable access to resilient infrastructures
- Better risk preparedness and NBS opportunity identification
- Digital twin provision driving innovative climate analytics for stakeholders
- Innovation in supporting local value chains
- Novel and replicable NBS for enhanced critical infrastructure protection



The Mediterranean has long been recognised as a climate “hotspot” region exposed to prolonged heatwaves, severe droughts and intense wildfires. These extreme conditions negatively impact human health, outdoor activities, ecosystems, and food production. To address these challenges, the EU Mission on Adaptation to Climate Change aims to support at least 150 European regions and communities towards climate resilience by 2030.

One of the most effective approaches to building climate resilience is by integrating nature-based solutions (NBS) that provide and protect valuable ecosystem services. NBS can address biodiversity loss, healthier cities and disaster risk reduction to create stronger climate resilient communities and infrastructure.



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