

TAIEX TSI - Enhancing disaster risk management and climate change adaptation in Cyprus

Promoting the uptake of adaptation actions by local authorities

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Cyprus Energy Agency

Non-Governmental, Nonprofit organization Officially established 9/2/2009

Co-funded by the European Commission (75%) and the Union of Cyprus Communities (25%) for three years.















Active member of:

- Enterprise Europe Network, helping companies innovate and grow sustainably
- FEDARENE, the European Federation of Agencies and Regions for Energy and the Environment
- Energy Cities, the European Association of Local Authorities in Energy Transition (VP for Smart 7 Sustainable Islands)

Promoter of:

- EU Urban Agenda, partnership for Innovative and Responsible Public Procurement
- Covenant of Mayors, supporters for decarbonised and resilient cities









VISION

«A just, inclusive, and climate-resilient Cyprus, that is governed by the principles of sustainability.»

Nature for Catchments Launchramp

Build back better with Nature-Based Infrastructure (NBI) by working with public authorities and financiers to design solutions that:

- » Strengthen economic recovery & flood resilience
- » Enhance biodiversity

» Are bankable, practical, and replicable in Cyprus





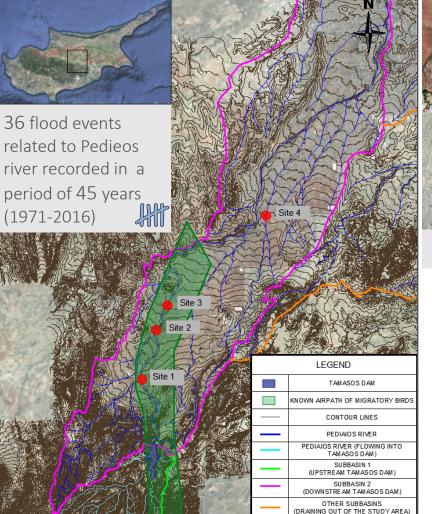


Stakeholders Workshop «NbS to mitigate the flood risk along Pedieos river» (Lakatamia Municipality)

Main Problems	Flow velocity	Risk of damage	Ecosystem health	Infiltration rate	Vulnerability
Properties near and inside the riverbed	↑	↑	\downarrow	\downarrow	+++
Invasive flora species	\downarrow	\	\downarrow	↑	++
Debris and waste materials	↑	↑	\downarrow	\downarrow	+++
Enclosed concrete channels	↑	↑	\downarrow	\downarrow	+++
Extensive use of impervious materials	↑	↑	\downarrow	\	+++

Flood Events XXX

- **Fluvial »** Excessive rainfall (overflowing water)
- flooding » Limited culverts' capacity, debris / uncleaned riverbed
- Pluvial » Flash floods on impervious surfaces
- flooding » Poor maintenance of urban drainage systems
 - » Limited capacity of urban drainage systems





Area of interest

- » Relatively flat ground
- » Riverbed (1ha) & Private plot (0.7ha)
- » Protection zone (Z1)
- » Afforestation (Tiny forest)





Designing the Sustainable Energy and Climate Action Plans 30 strategies for Community Council clusters



Technical Support for Community Councils

Preparation of Action Plans and investments for energy and climate for all community council clusters

- 1) Baseline inventory of CO₂ emissions & energy consumption and determination of targets for reducing energy consumption and CO₂ emissions by 2030
- 2) Preparation of a catalogue of actions/projects for energy efficiency and renewable energy sources (RES)
- **3) Assessment of risk and vulnerability** to climate change, identification and analysis of actions for adaptation to climate change

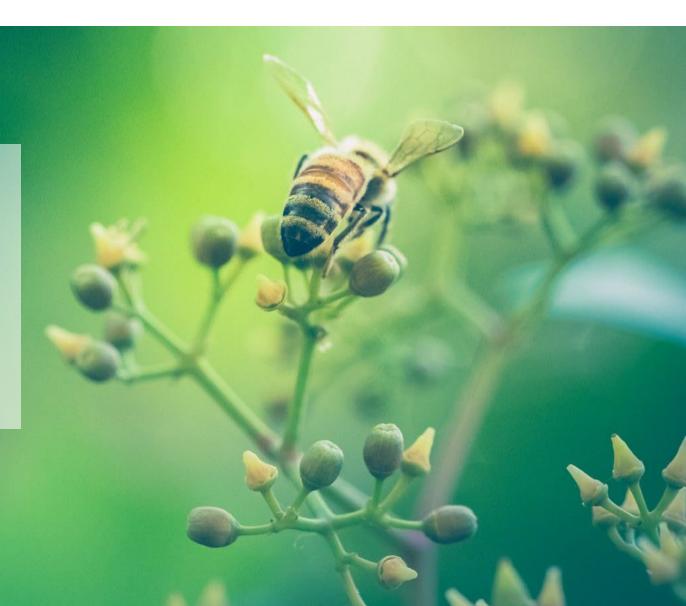


Sustainable Energy and Climate Action Plans

Proposed actions to tackle:

Extreme heat, drought, forest fires, coastal erosion, flooding, etc.

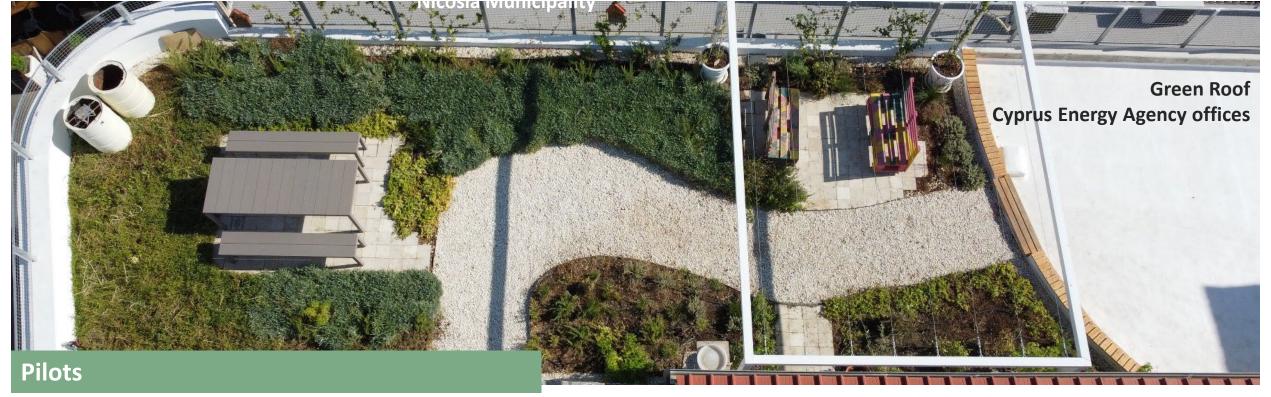
- » Use of Permeable materials
- » NbS along riverbanks
- » Protection of crops from extreme weather such as hail
- » Expanding urban greenery











Picture taken on 6/6/2024 at noon, with an air temperature of 41°C.











Challenges in Implementing Climate Adaptation & NbS Projects

Market and Technical Capacity

- » Market not ready for large-scale NbS adoption
- » Limited expertise among engineers and designers
- » Few reference projects; each case needs custom solutions

Institutional & Regulatory Barriers

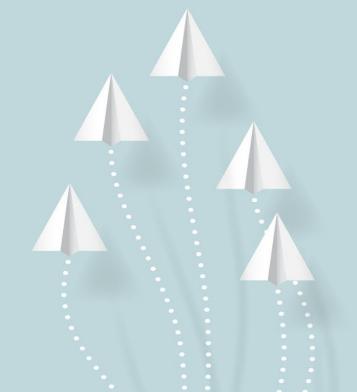
- » Limiting design and permitting criteria
- » Misalignment between public authorities
- » Limited understanding of NbS benefits by local authorities

Evidence & Data Gaps

- » Adaptation benefits hard to measure or prove
- » Lack of accessible data for assessing needs and impacts

Financing & Investment

- » EU programmes offer support, but national funding is harder to secure
- Adaptation projects often less prioritized compared to energy or RES projects
- » Difficult to attract investment due to non-quantifiable benefits









Climate Change manual access

Sustainable Mobility manual access



NbS manual for local authorities access



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Supported by the European Commission through the Intelligent Energy-Europe programme and the Cyprus Union of Communities

Member of FEDARENE, EnergyCities, and Enterprise Europe Network

Promoter of the Climate & Energy Initiative of the Covenant of Mayors European, and of the Partnership on Innovative and Responsible Public Procurement of the European Urban Agenda

We envision a just, inclusive, and climate-resilient Cyprus, that is governed by the principles of sustainability

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Thank you!