Nature-based Solutions Schools as Spaces for Learning, Knowledge Exchange and Co-Development in Climate Adaptation

From pilot implementation in the Milan Metropolitan Area to scaling through the NbS Italy HUB framework

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BACKGROUND & CHALLENGE

NbS are increasingly promoted as **tool** for **climate change adaptation** —> **BUT** their **implementation** often remains **fragmented**.

Technical and design aspects are relatively **well developed** —> **WHILE capacity building**, financing **strategies** and long-term **management** are underestimated.

This imbalance can lead to **weak uptake**, social **resistance** and limited **scalability**.

Key challenge:

*How can **education** and **training** support **NbS implementation** beyond project-based approaches, addressing governance, investment and delivery conditions?*

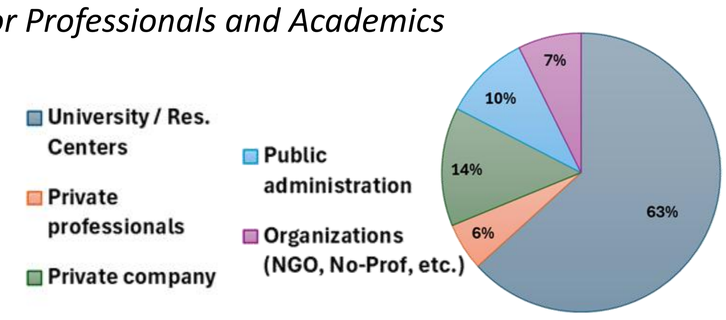
CASE STUDY 1: MILAN NbS SCHOOL (Hosted by Politecnico di Milano, July 2025)

From Planning to Action – NbS Summer School for Professionals and Academics

Participants: 32 professionals and researchers

Format: site visits, workshops and simulations

Funded by: NetworkNature Labs (call 2024)



Day 1 – NbS in practice

Field visits to large-scale **NbS interventions** (SPUGNA "Sponge City" project—PNRR funding): I) Green walls; II) rain gardens; III) Urban forests; IV) Permeable and stormwater retention systems

Key observations:

Maintenance planning is a critical success factor

Trade-offs: rapid **implementation** VS **co-design**

Importance of **public acceptance**/communication

Days 2, 3 – METHODS, GOVERNANCE & FINANCING

Workshops focused on: A) Ecosystem services assessment and spatial **planning**; B) Co-creation and co-governance **tools**; C) Decision-support systems (**DSS**); D) NbS **financing** and business models

Group work:

Systemic **urban challenges**: flooding, heat, air pollution.

Integrated **NbS strategies**: Technical solutions; Governance models; Financing mechanisms

CONCEPT: NbS SCHOOLS

Practice-oriented **capacity-building** spaces, launched as *Bootcamp* for 2026 (Bari, July)

- Learning for **planners** & **practitioners**
- **Co-creation** & experimentation
- **Replicable** formats for NbS Hubs

Education as *enabling infrastructure* (not dissemination)

WHY EDUCATION MATTERS

EDUCATION
Capacity-building backbone for NbS

Shared Operational **Language** (among actors)

Experimentation with Governance & **Financing**

Clarified Roles, **Responsibilities** & **Risk** Allocation

Reduced Implementation Uncertainty & **Risk**

Co-governance & Investment-ready **NbS implementation pathway**

KEY INSIGHTS & LESSONS LEARNED

- NbS effectiveness depends on **governance** and **financing** —> *not only design*
- Lack of **maintenance planning** is a major vulnerability
- **Early** and structured **participation** reduces **resistance** and **risk**
- Education enables **shared understanding** —> before co-governance and investment

SCALABILITY & NEXT STEPS

MILAN 2025

- **Pilot** NbS School
- Proof of **concept**
- Lessons on **governance** and **finance**

BARI 2026 Bootcamp (hosting Bari University)

- Focus on **local** & regional **public administrations**
- Strategic **planning** & investment readiness
- Engagement of **stakeholders**, utilities & **investors**
- Supported by **NetworkNature**;**ALTAMIRA** (**EC**-funded);and **IUCN**

BEYOND BARI

- **Replicable** capacity-building **format** with local/**regional** focus
- NbS Italy **HUB**; NetworkNature; EC; IUCN; **NbS EU HUB** (etc.)
- From planning to **investment pathways** for climate adaptation

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