

New perspectives for research on Biodiversity

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THE LAST EU POLICIES & STRATEGIES ON BIODIVERSITY AND RESTORATION



EU Biodiversity Strategy for 2030

European Green Deal

A new Circular Economy Action Plan

Caring for soil is caring for life

Zero pollution strategy

EU Soil Strategy for 2030

Common Agricultural Policy 2023-2027

Proposal for a Soil Monitoring Law

New EU Strategy on Adaption on CC

European Climate Law - New EU Forest strategy - Fitting for 55 package

Proposal for Nature Restoration Law

Nature Restoration Law

Farm2Fork strategy

Chemicals strategy for sustainability "towards a toxic-free environment"



REGULATIONS

REGULATION (EU) 2021/1119 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 June 2021 establishing the European Union taxonomy for sustainable activities and amending Regulation (EU) No 1286/2013 and (EU) No 1286/2013 (European Climate Law)

NATURE RESTORATION LAW

(APPROVED BY EU PARLAMENT ON 12 JULY 2023)

New binding targets suggested by the law:

- restore habitats and species protected by the EU nature legislation
- reverse the decline of pollinators by 2030
- no net loss of green urban spaces by 2030 and a minimum of 10% tree canopy cover in European cities
- improved biodiversity on farmland e.g. for grassland butterflies, farmland birds, high-diversity landscape features
- restore drained peatlands
- healthier forests with improved biodiversity
- at least 25.000 km free-flowing rivers by 2030
- restore seagrasses and sea bottoms

THE NATURE RESTORATION LAW WILL:

Restore at least **20% of EU land and sea by 2030**, and all ecosystems in need of restoration by 2050

Require Member States to develop **National Restoration Plans** taking account of national circumstances

Build on EU nature laws, focusing on all natural habitats, and not just those protected under **Birds and Habitats Directives** or **Natura 2000**

Demonstrate **EU leadership in protecting and restoring nature** and set the bar for global action ahead of the Biodiversity COP15

WHY DO WE NEED TO ACT?

! EU nature is in alarming decline, with **more than 80% of habitats in bad or poor conservation status**. **Peatlands, grasslands and dunes are worst affected**. Wetlands have shrunk by 50% in Western, Central and Eastern Europe since 1970



! **Up to 70% of EU soils are in an unhealthy condition**. Severely eroded croplands are estimated to contribute to a loss in agricultural productivity of **EUR 1.25 billion** per year in the EU



! In the past decade, **71% of fish and 60% of amphibian populations have suffered a decline**



! **One in three bee and butterfly species in the EU are in decline**, and one in ten such species on the verge of extinction

Nature Restoration Law

For people, climate, and planet

By restoring nature, we invest in a sustainable, resilient and more productive future



Every EUR spent in land restoration brings an economic return of EUR 8 to EUR 38



Peatlands store nearly 30% of global soil carbon. Restoring drained peatlands could save up to 25% of Europe's land-based greenhouse gas emissions



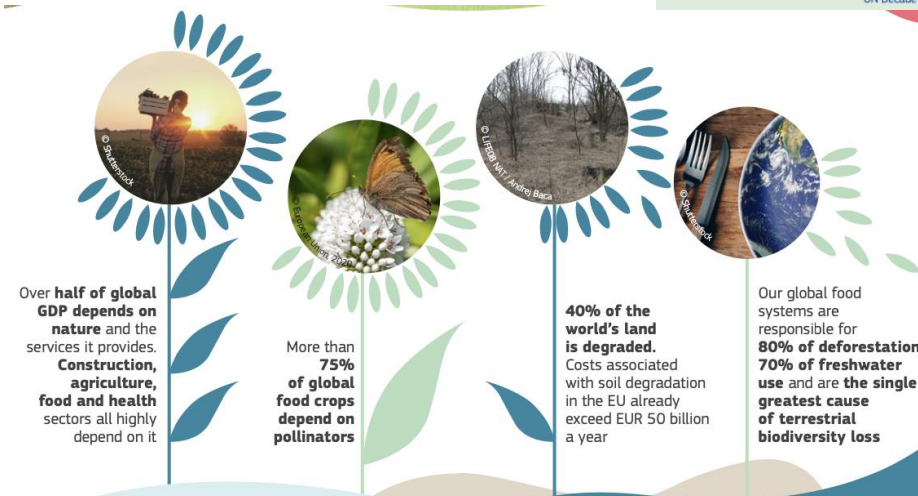
Natural rivers, floodplains and wetlands absorb floodwaters more effectively and at lower cost than any human-made structure



Urban green areas provide essential temperature reduction, absorb excess rainfall, and support physical and mental wellbeing

Ecosystems support all life on Earth.
The healthier our ecosystems, the healthier the planet – and its people.

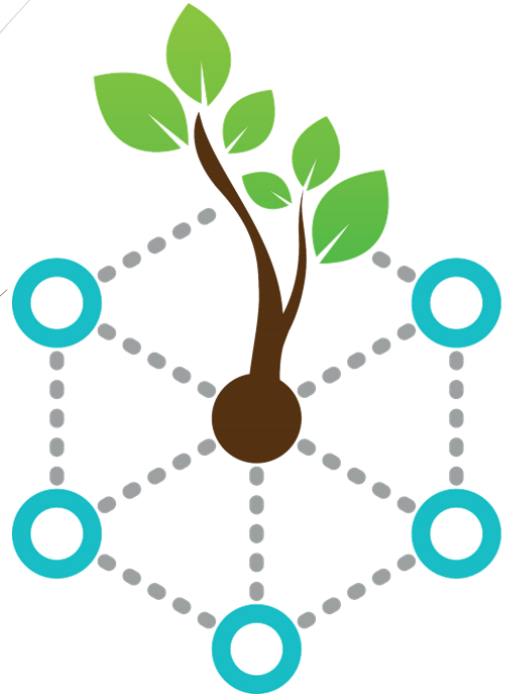
UN Decade on Ecosystem Restoration 2021-2030





“actions to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems which address social, economic and environmental challenges effectively and adaptively, while simultaneously providing human well-being, ecosystem services, resilience and biodiversity benefits” (UNEA, 2022).

First Italian Hub for Nature-based Solutions



NBS
ITALY HUB



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SUSTAINABLE DEVELOPMENT GOALS



IMPACT ASSESSMENT FRAMEWORK


 Climate Mitigation and
Adaptation


 Water Management


 Coastal Resilience


 Green Space
Management


 Air Quality


 Urban Regeneration


 Participatory Planning
and Governance

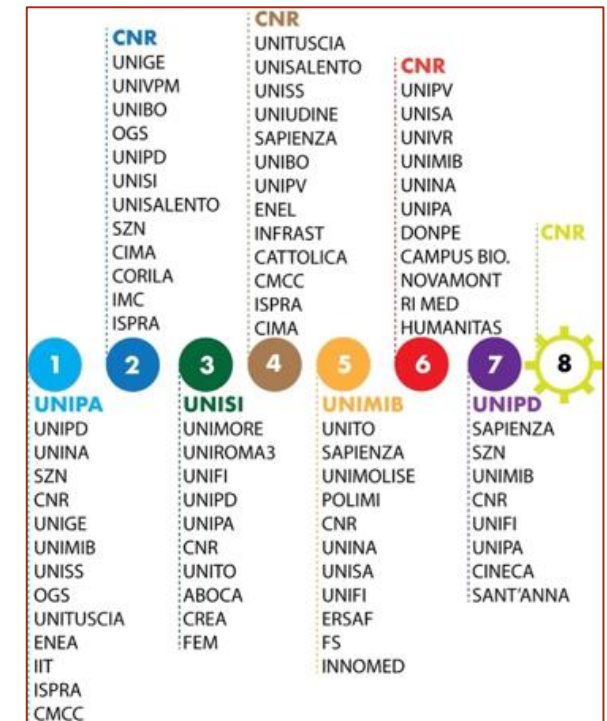
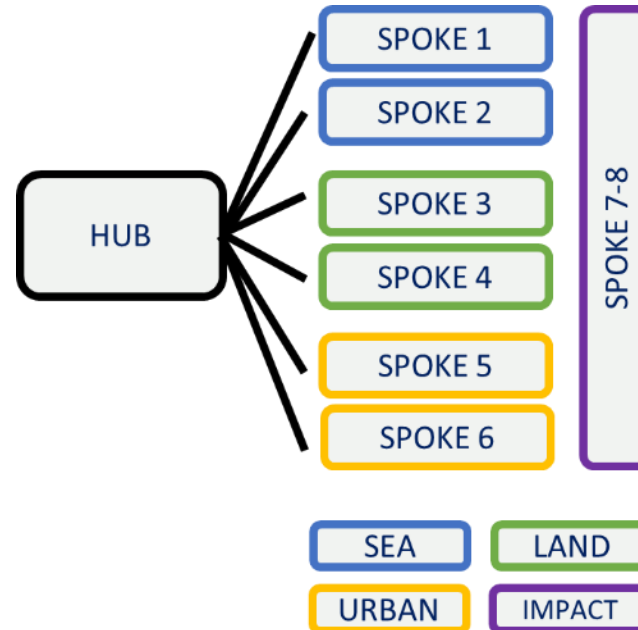
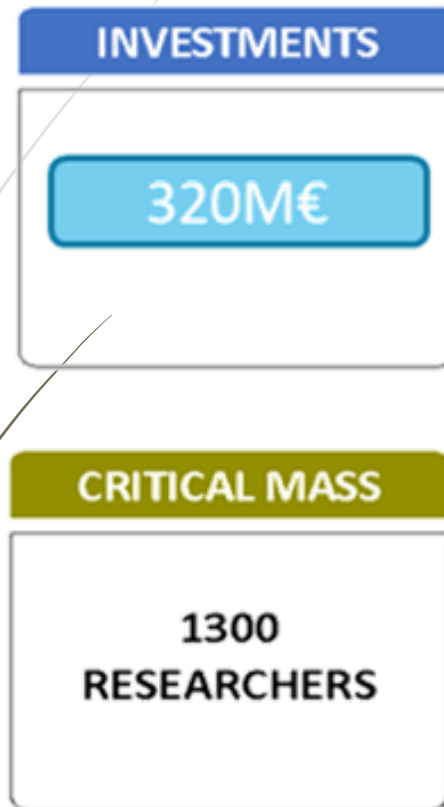

 Social Justice and
Social Cohesion


 Public Health and
Well-being

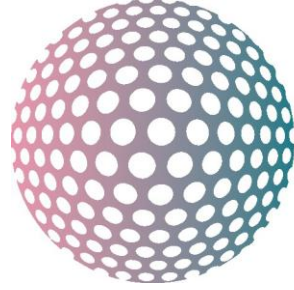

 Economic Opps. and
Green Jobs

Raymond, C.M., Frantzeskaki, N., Kabisch, N., Berry, P., Breil, M., Razvan Nita, M., Geneletti, D., Calfapietra, C. (2017). A framework for assessing and implementing the co-benefits of nature-based solutions in urban areas. *Environmental Science and Policy*. 77:15-24.

The National Biodiversity Future Centre



**The protection of the environment,
biodiversity and ecosystem is now included in
the Italian Constitution in articles 9 and 41 !!!!!**



NATIONAL BIODIVERSITY FUTURE CENTER



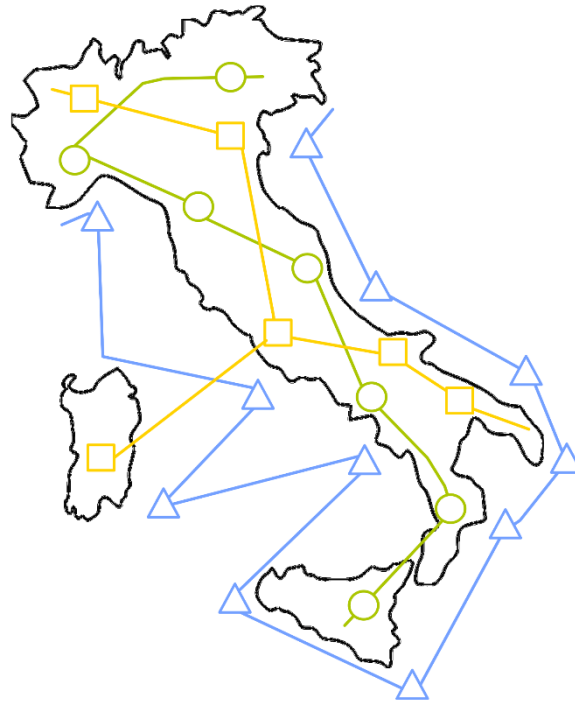
NBS

WHERE?

SEA

LAND

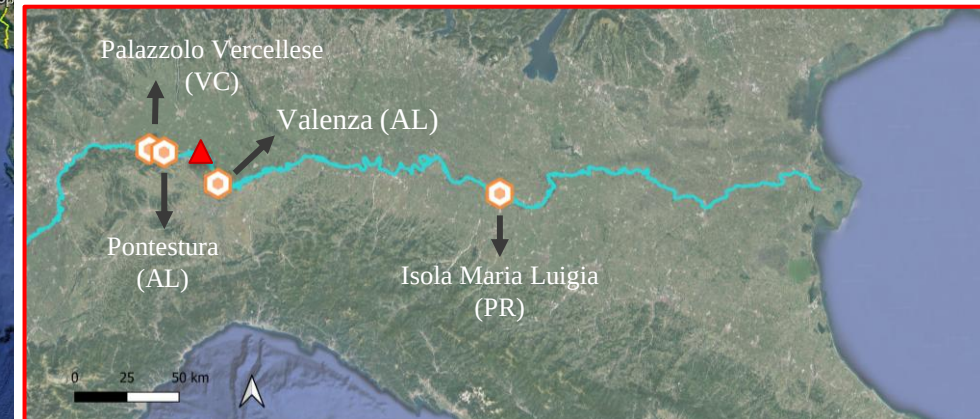
URBAN



**NBS for BIODIVERSITY and
Ecosystem RESTORATION**



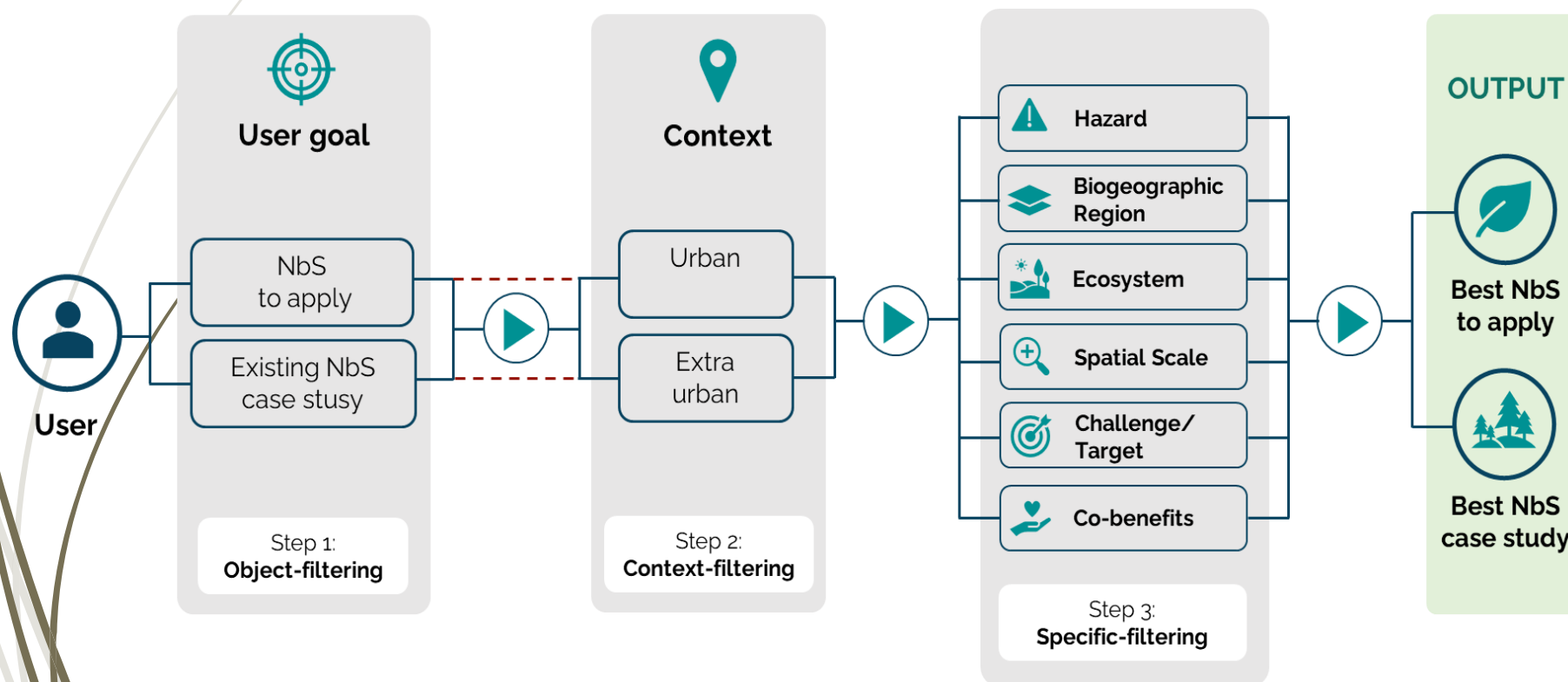
Spoke 4 (Land) 5 (Urban)
Spoke 6 (Human Health)



▲ Casale Monferrato (sede CREA-FL)

SPOKE 4 – 12 mega-siti terrestri sono stati identificati (48,830 km²) + asta del fiume Po

The Italian NBS Catalogue and Planning Supporting Tool (Spoke 4-5)



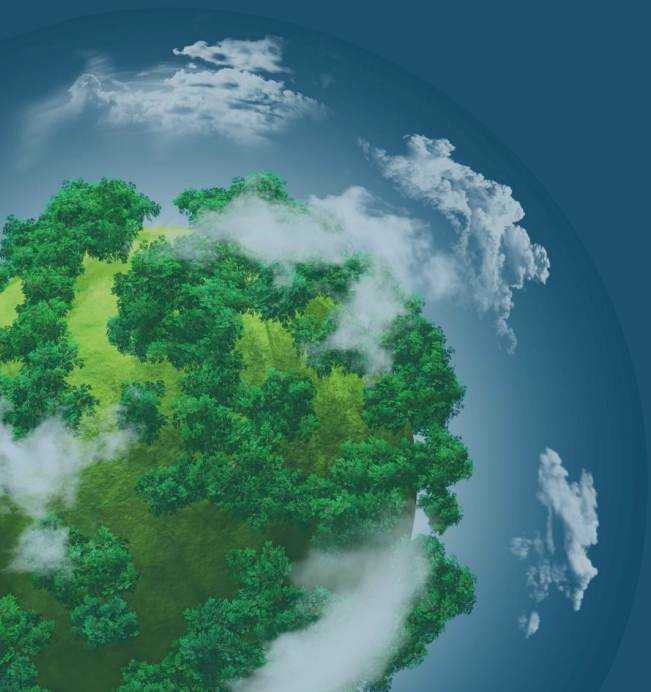


Thanks!

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Eu 2050 - LIVE IN HARMONY WITH *NATURE*



NATIONAL
BIODIVERSITY
FUTURE CENTER