

# Présentation - Europe et SfN : vers un changement d'échelle ?



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# Nature-based Solutions in the EU R&I and policy context



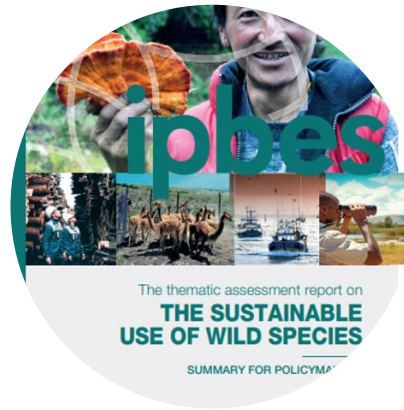
*Susanna Gionfra – Biodiversity and Nature-based Solutions  
Policy Officer – RTD B3*

# IPBES assessments over the years



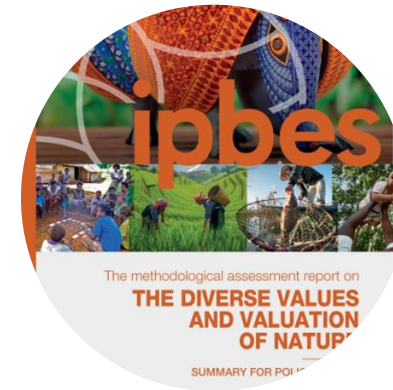
**2019**

**1 million species at risk  
5 direct drivers of biodiversity loss  
Transformative changes**



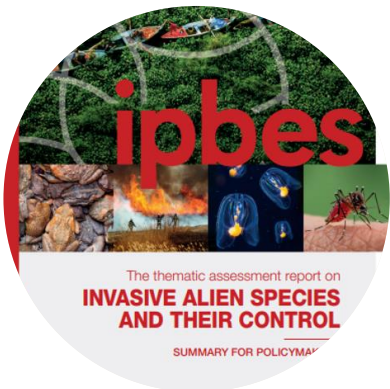
**2022**

**50k wild species meet needs of billions worldwide  
1 in 5 people rely on wild species for income and food**



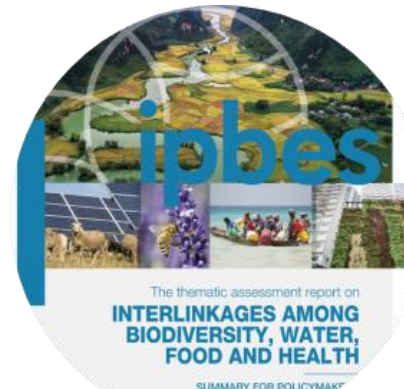
**2022**

**Narrow set of market values of nature underpinning the biodiversity crisis  
>50 methods and approaches**



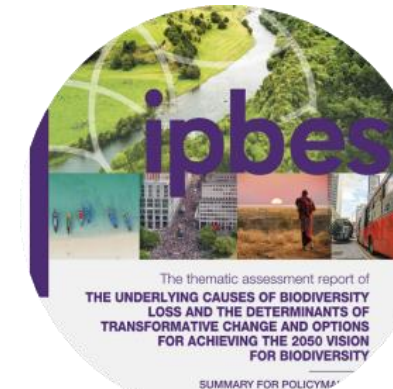
**2023**

**Key role of IAS in 60% of global plant & animal extinction  
Annual costs >\$423 bln**



**2024**

**Tackling together 5 interlinked global crises in biodiversity, water food, health and climate**



**2024**

**Options to achieve transformative change to halt biodiversity collapse  
\$10 trillion could be generated in business opportunity value  
395 mln jobs by 2030**

## Time to act

*“there is a closing window of opportunity to avoid further biodiversity loss and prevent triggering the potentially irreversible decline and projected collapse of key ecosystem functions. Delaying action to achieve global sustainability is costly compared with the benefits of taking action now”*

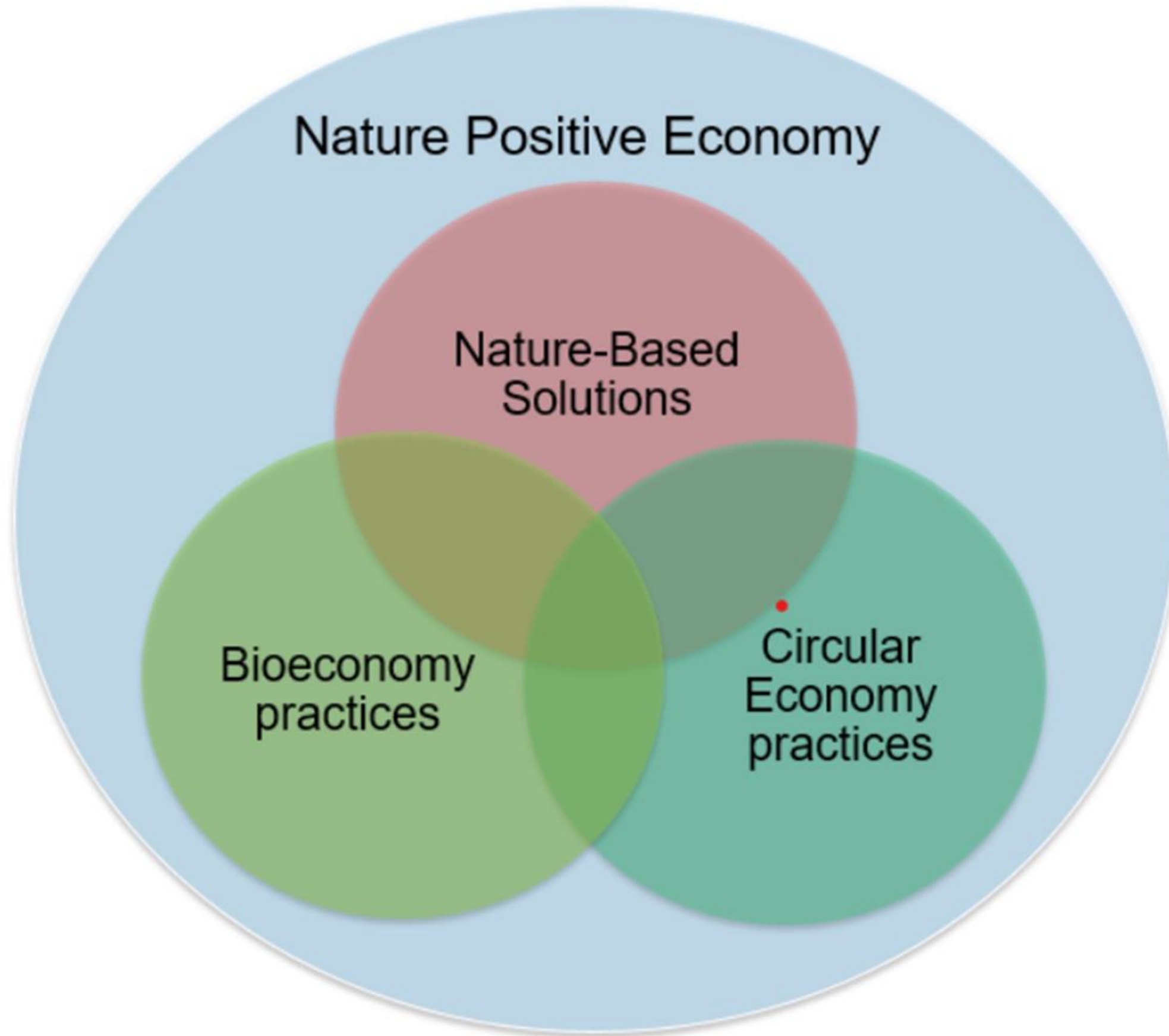
“Transformative change for a just and sustainable world  
is  
**urgent, necessary and challenging,**  
**but possible,**  
to halt and reverse biodiversity loss and safeguard life  
on Earth.”

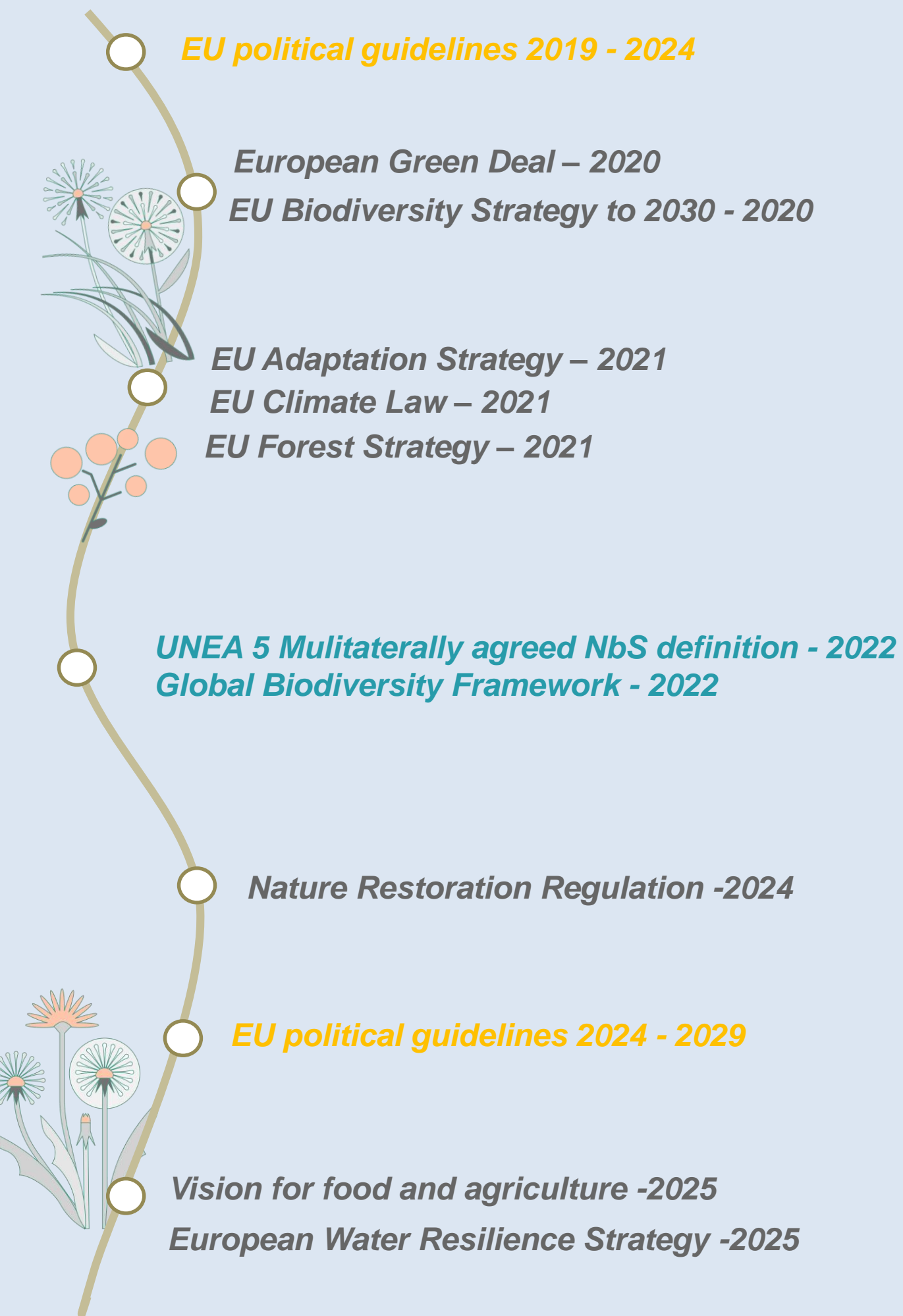


# Nature-based Solutions are part of the action!



- ✓ Actions to protect, restore, conserve or sustainably manage natural or modified ecosystems
- ✓ Addressing one or more societal challenges
- ✓ While simultaneously benefitting people and biodiversity





# NbS in the EU policy context

- At the core of the EGD lies the recognition that building a climate-resilient and sustainable future requires transformative change—one that places **nature at the heart of our solutions**.
- NbS as central in the EGD vision
- Mainstreaming NbS across policies
- From concept to implementation



# 2024-2029 political guidelines

A new plan for Europe's sustainable prosperity and **competitiveness**

A new era for European **Defence and Security**

Supporting **people**, strengthening our societies and our social model

Sustaining our **quality of life**: food security, water and nature

Protecting our **democracy**, upholding our values

A **global Europe**: Leveraging our power and partnerships

**Delivering together** and preparing our Union for the future

- Stay the course on the **European Green Deal** and focus **incentives** and equitable and efficient **implementation** in the next phase (e.g. implementation of the Nature Restoration Regulation)
- Ensure we reach our international commitments (e.g. Kunming-Montreal Global Biodiversity Framework)

# A Competitiveness Compass for the EU

Sustainable prosperity and competitiveness







# What role does nature play?

- The **green transition** is not only an environmental necessity but also **a source of economic opportunity**, a strategic competitive advantage, and a geopolitical imperative.
- Over 50% of global GDP depends moderately or heavily on nature, and within the EU, **more than 72% of companies rely on at least one ecosystem service**.
- On a global scale, land degradation and the diminishing capacity of ecosystems could cause the global economy to lose \$23 trillion in economic losses
- **Biodiversity loss**, therefore, is not just an environmental issue; it is **a challenge to economic resilience**, supply chain stability, and long-term productivity across sectors.
- In 2019, ecosystem services generated a total annual flow of benefits worth 234 billion euros in the EU.



# Making infrastructure climate-resilient

- It is estimated that NbS working as infrastructure could cost 50% less than grey infrastructure alternatives alone
- NbS as infrastructure can deliver 28% in added value such as carbon sequestration, cleaner air and water, better health, recreational services, jobs and opportunities for growth in other sectors (e.g. real estate and tourism).



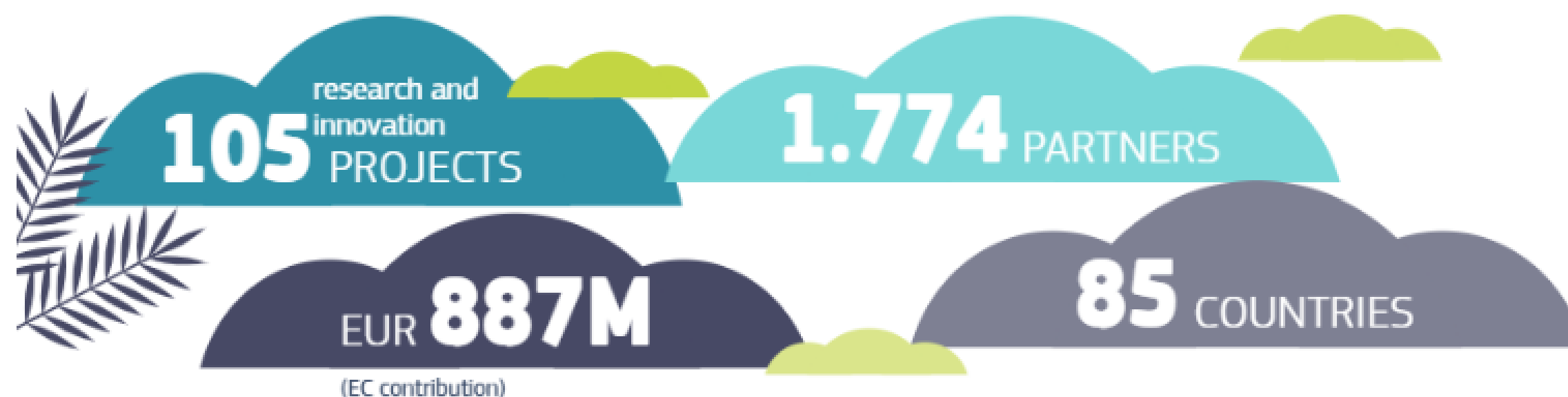


# A new milestone

*“we have to radically step up our efforts into climate resilience and adaptation, and **nature-based solutions**”.*

# Horizon 2020 & Horizon Europe

EU-funded research and innovation projects tackle the climate and biodiversity crises implementing nature-based solutions in different environments.





# Horizon 2020 & Horizon Europe



2025 infographic



# Horizon Europe

Nature-based solutions are identified under the Horizon Europe Strategic Plan for 2025-2027



Work is ongoing for the preparation of Horizon Europe Work Plan 2026-2027

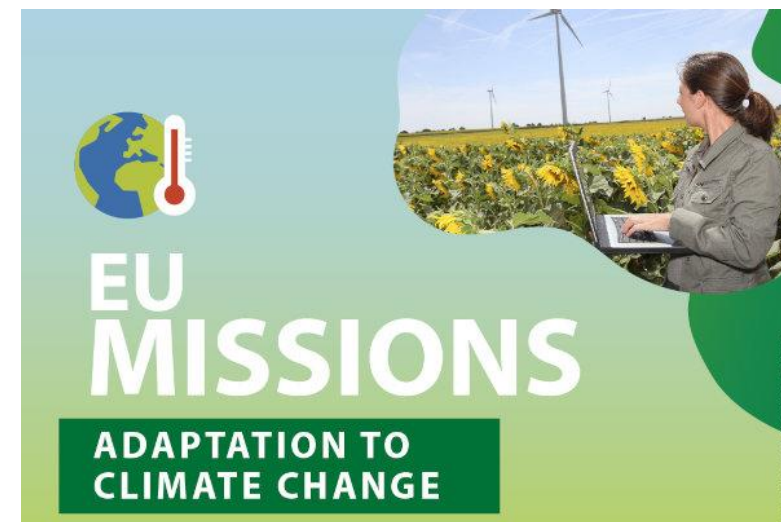


Heitor Report: recommendation to address societal challenges more effectively (biodiversity loss, climate change, planetary boundaries, health)



# Horizon Europe - Missions

**Mission Adaptation to Climate Change**



**Mission Restore our Oceans & Water**



**Mission Climate-neutral and Smart cities**



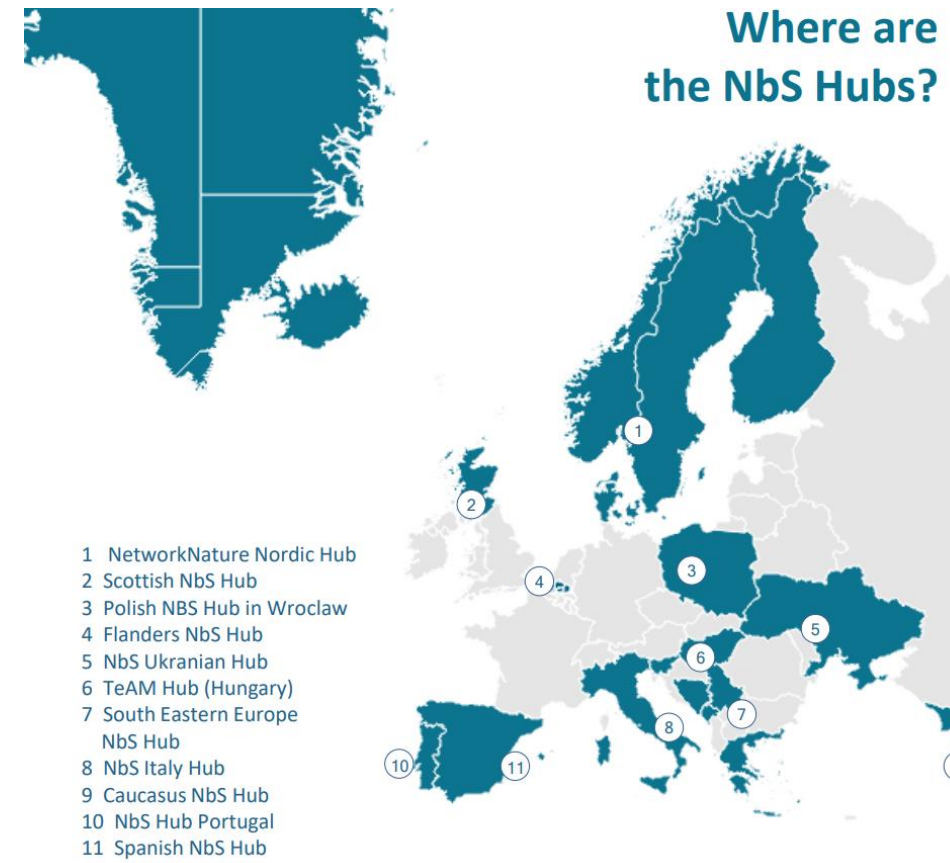
**Mission Soil Deal for Europe**



# Community & capacity building: NetworkNature



Resources, case studies &  
events



NbS Hubs



NbS databases



# NetworkNature (Expanded) Database of NbS R&I projects

- NbS-focused projects funded by already explored programmers like LIFE, Horizon 2020, Interreg and Biodiversa+.
- Additional programmes or initiatives, including Horizon Europe, Water4All, the Sustainable Blue Economy Partnership (SBEP), Driving Urban Transition (DUT) and EJP Soil.

471 projects  
from 2011 to  
2024

Over EUR 2  
billion  
allocated to NbS R&I and  
implementation projects

# Biodiversa+ BiodivNbS call

- The Partnership aims to connect science, policy and practice for transformative change for biodiversity, **including contribution to high-end knowledge for deploying NBS.**
- The aim of the BiodivNBS call was to support transnational research projects which contribute to promoting Nature-based Solutions and the integration of these solutions into policy-making at local, regional, and national levels.

34 research  
projects

over EUR 40  
million

from national and regional funding  
organisations and the European  
Commission

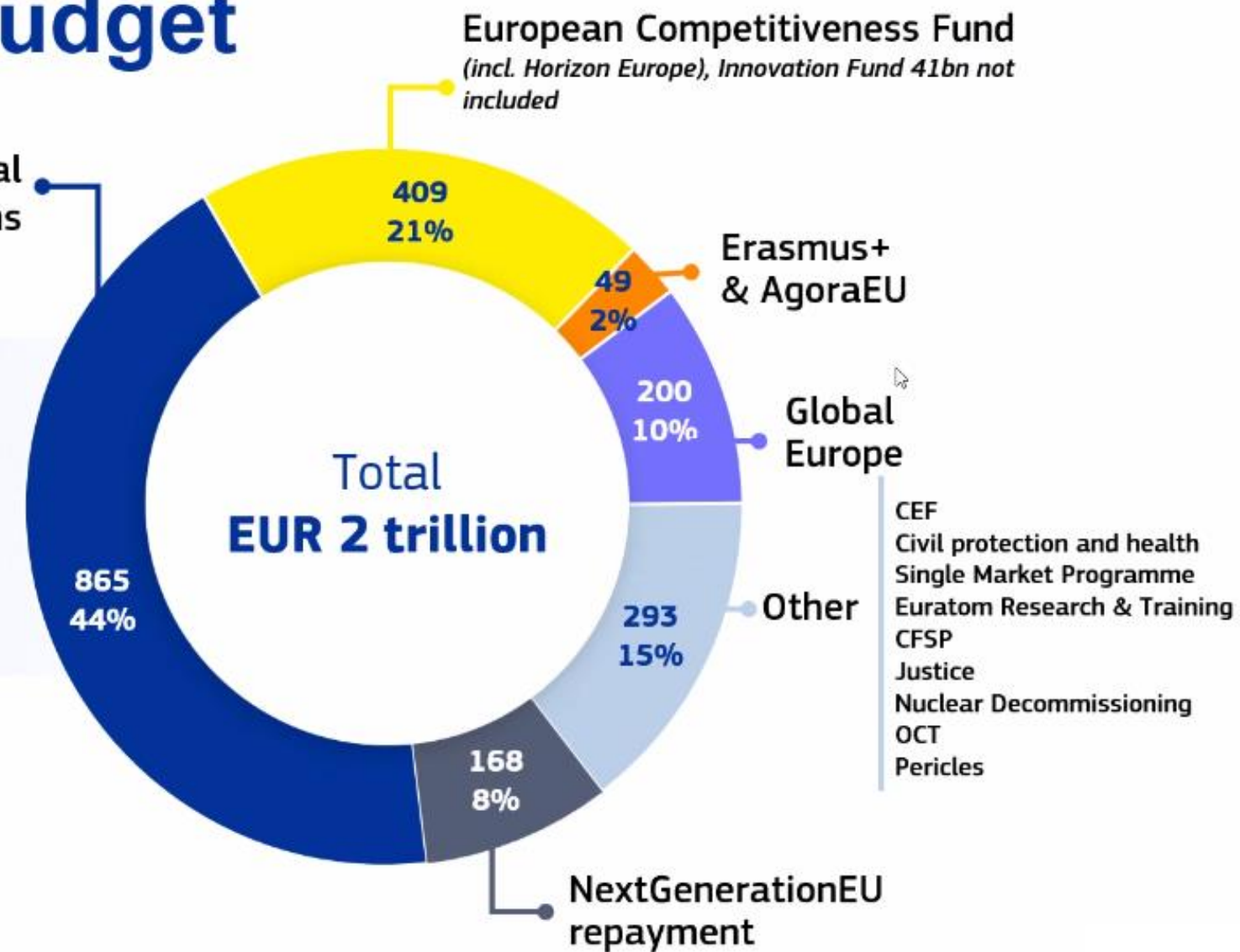


# Multiannual Financial Framework 28-34

## An ambitious budget

- From 52 to **16 programmes**
- **Simpler** for beneficiaries
- **Results** oriented
- More **agile**

National and Regional  
Partnership Plans



All amounts in EUR, current prices, adjusted with 2% deflator

# Multiannual Financial Framework 28-34

## An ambitious green spending target

- A ‘green target’ of 35% of the EU budget:
  - To steer funding towards **climate change mitigation, climate change adaptation and resilience, biodiversity, water and marine, pollution prevention, circular economy.**
  - Underpinned by legally binding **programme-specific targets**

| 35% climate and environment target               |     |
|--|-----|
| National and Regional Partnership Plans          | 43% |
| European Competitiveness Fund, excluding defence | 43% |
| Horizon Europe                                   | 40% |
| Connecting Europe Facility                       | 70% |
| Global Europe                                    | 30% |



## European Competitiveness Fund

- **Clean Transition and Industrial Decarbonisation window:** solutions to protect, restore and improve the quality of the environment, including to halt and reverse biodiversity loss and to tackle the degradation of ecosystems, sustainable blue economy sectors including ocean observation technologies and preserving ecosystems.
- **Health, Biotechnology, Agriculture and Bioeconomy window:** support to nature-positive economy and the protection of natural resources biodiversity while contributing to long term food security in the Union

## Horizon Europe

- The Commission proposes to double the budget of the research and innovation framework programme to **EUR 175 billion (subject to 40% green target)**
- 'Activities should reflect the importance of **tackling the dramatic loss of biodiversity and contribute to the preservation and restoration of nature, ecosystems and their services**. The integration of environmental science in activities is necessary to **avoid damage to the environment, to maintain clean environment and to restore healthy ecosystems.**'

# Thank you

RTD.B.3 Susanna Gionfra



# NATALIE – un projet SfN innovant

de la mission adaptation au changement climatique (MACC)

de la commission européenne



NATALIE



**Sonia SIAUVE**  
coordinatrice du projet





# NATALIE : un projet d'innovation

projet EU de grande échelle pour la promotion des solutions fondées sur la nature comme mesure d'adaptation au CC



NATALIE



60

Months

Sept. 23 - Aug. 28



43

Partners



13

Countries



19.2 M€

Budget



OIEAU

Coordination

## Programme de financement : Horizon Europe

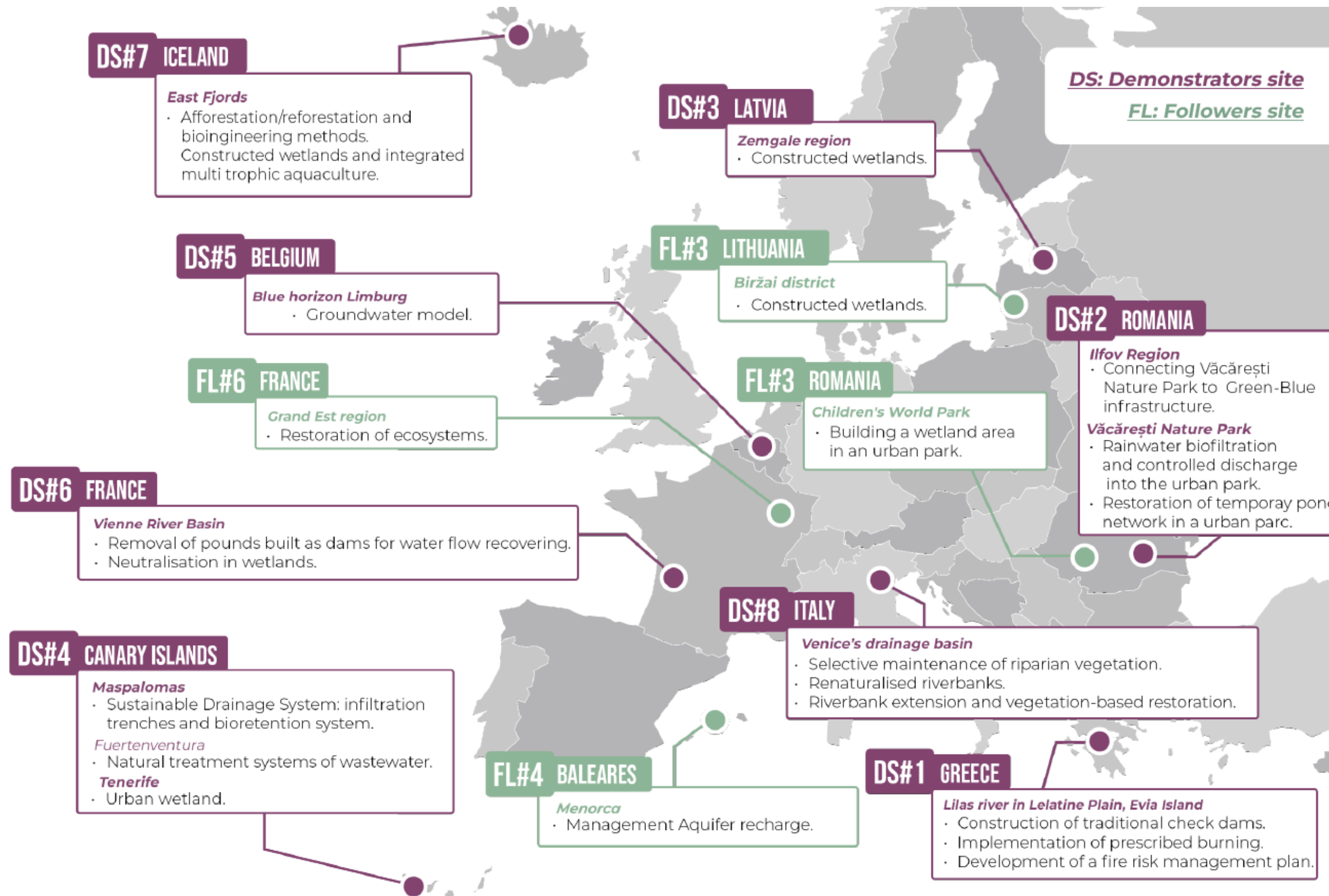
- ➔ Mission « Adaptation au changement climatique » Instrument issu de la nouvelle stratégie d'adaptation de l'UE de 2021

**Objectif** = aider au moins 150 régions et communautés européennes à devenir résilientes au climat d'ici à 2030.  
311 autorités ont signé la charte (déc 2023)

**Thème de l'appel d'offre EU** : Testing and demonstrating transformative solutions on climate resilience, mainstreaming nature-based solutions in the systemic transformation



# NATALIE : un projet de mise en œuvre de SfN



6 zones biogéographiques

34 mesures  
mises en œuvre  
évaluées  
étudiées

+ nouveaux sites  
Grand Est (FR)  
Sardaigne (IT)





# NATALIE : 4 piliers de travail

pour démontrer que les SfN sont des mesures robustes d'adaptation voire d'atténuation au changement climatique



## NBS implementation

- 34 mesures implemented in 8 demo sites throughout Europe
- Replication studied in 4 replication sites
- Various climatic hazards addressed: wildfire, flood, water quality, biodiversity loss, sea level rise ...

## Financial tools



- Test tools to leverage private investment:
  - ♦ The Nature Investment Launchramp (NIL)
  - ♦ The Sustainable Asset Valuation (SAVi)
  - ♦ The Natural Assurance Business Canvas (NABC)
- Test a funding platform for NBS for CC adaptation
- Liaison with other European initiatives



## Digital tools

- NBS performance assessment
  - impacts of climate change assessment
- socio-economic and environmental impacts evaluation
- NBS knowledge booster
  - = hub of knowledge, including an open data space

## Social engagement



- Social Network Analysis to map stakeholders, their profile, interests, influence or conflicts
- multi-scale stakeholders engagement in NBS co-design
- social benefits of NBS through citizen science
- twinning activities between demo and follower sites



NATALIE



# NATALIE : travail au sein du cluster NBS4EU

pour capitaliser les connaissances, s'entre-aider, maximiser l'impact de 7 projets sœurs et communiquer des recommandations politiques



**NBS4EU** est un cluster de **7 projets sœurs** réunis autour d'un même objectif.



NBS4EU vise à **accélérer** et à **généraliser la mise en œuvre des solutions fondées sur la nature** afin de renforcer la résilience climatique dans les différentes régions d'Europe.















Avec un investissement total de près de **140 millions d'euros** répartis entre les différents projets, il s'agit de l'un des thèmes les plus importants financé par le programme Horizon Europe !

# NATALIE : travail au sein du cluster NBS4EU

pour capitaliser les connaissances, s'entre-aider, maximiser l'impact de 7 projets sœurs et communiquer des recommandations politiques

## Climate threats

-  Heat Waves
-  Floods
-  Droughts
-  Wildfires
-  Water Scarcity
-  Biodiversity loss
-  Soil degradation
-  Coastal erosion
-  Storm surges
-  Landslides
-  Snow line shifting
-  Sea Level Rise

## NbS across landscapes & ecosystems

### Coastal & sea

- Dunes
- Coral reefs
- Seagrass meadows
- Salt marshes



### Rural & agricultural

- Agroforestry
- Composting
- Constructed wetlands
- Native fauna



### Urban & peri-urban

- Green roof / wall
- Bioswale
- Unsealing soil
- Micro-forest
- Green corridors
- Rain garden



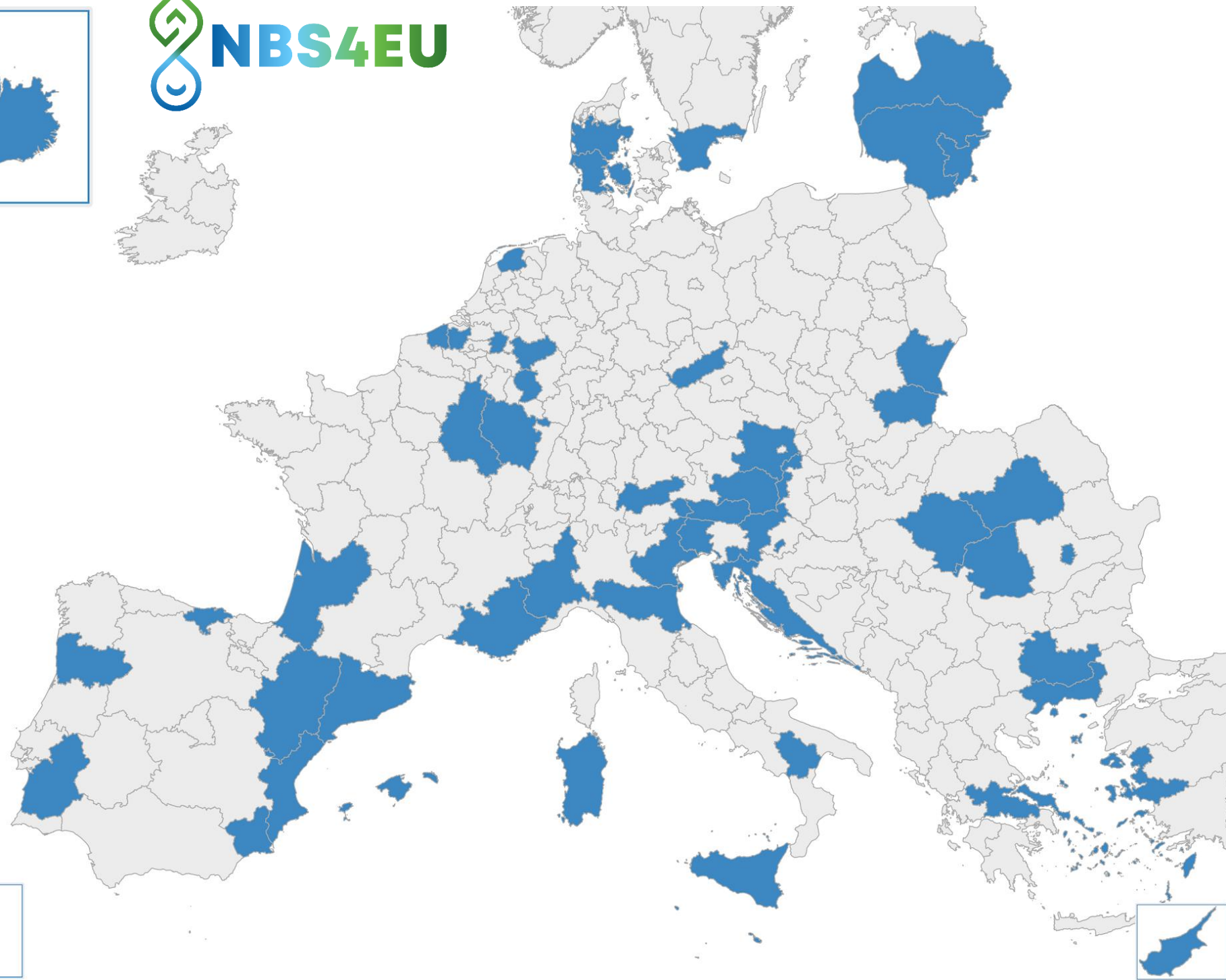
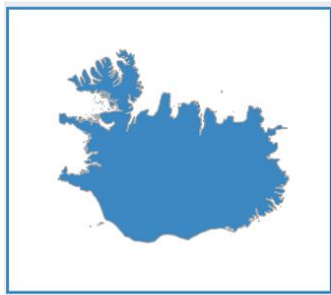
### Rivers and waters

- Riparian buffer
- Stone dams
- Lagoon restoration



### Mountains

- Terracing
- Protection forests





# NATALIE : liaison avec MIP4Adapt et NN+

pour assurer un alignement avec la stratégie européenne et travailler en coopération avec ces « hubs » européens



## MIP4Adapt

The Mission Implementation Platform

8 thematic working groups

- Citizen and stakeholder engagement
- Climate services
- Financing climate action
- Integrating mitigation and adaptation
- Monitoring and evaluation
- Transformational adaptation
- Water management
- Communication



6+1 Task forces

NBS project board (*project coordinators*)

- TF1: NBS data and knowledge sharing
- TF2: Integrated assessment framework
- TF3: Business governance and finance models
- TF4: NBS communicators
- TF5: Education
- TF6: Co-creation and co-governance



# Merci pour votre attention



[www.natalieproject.eu](http://www.natalieproject.eu)



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# Work Programme 2026-2027 – Horizon Europe, Cluster 6

## Introduction

R&I activities aim at empowering farmers, fishers and aquaculture producers to efficiently transform their production methods, making the best use of [Nature-based Solutions](#), technological, digital and social innovations and transferable knowledge while supporting fair incomes and the competitiveness of the entire EU food value chain.

## Destination - Biodiversity and ecosystem services

[Nature-based Solutions](#) are deep-rooted in this Destination, which will support the EU climate adaptation strategy and the EU climate mitigation targets by maintaining or improving natural carbon sinks, since natural ecosystems store large amounts of carbon globally and ecosystems' carbon sequestration potential is tightly linked to their biological diversity



**HORIZON-CL6-2026-01-BIODIV-04-two-stage:** Mainstreaming and scaling-up evidence-based Nature-Based Solutions towards a nature positive and climate-resilient economy  
=> 18M€ - 3 projects around 6M€

HORIZON-CL6-2026-01-BIODIV-01 Understanding and tackling the decline of insects

HORIZON-CL6-2027-01-BIODIV-03: Technical innovation to protect ecosystems and to scale up their restoration

HORIZON-CL6-2027-01-BIODIV-06: Living labs driving transformative change via knowledge integration and inclusive governance

HORIZON-CL6-2026-02-FARM2FORK-06: Advanced innovative solutions for improved competitiveness and sustainability in controlled environment agriculture (CEA)

HORIZON-CL6-2026-01-CIRCBIO-07: Advancing the European bio-based innovation enabled by biotechnology and biomanufacturing concepts

HORIZON-CL6-2027-01-CIRCBIO-06: Towards a Europe of Bioeconomy Places

HORIZON-CL6-2026-01-ZEROPOLLUTION-02: Bioremediation of Ukraine's ecosystems contaminated by conflicts

HORIZON-CL6-2026-01-ZEROPOLLUTION-03: Developing managed aquifer recharge techniques (MAR) in a rural context

HORIZON-CL6-2027-02-CLIMATE-01: Governance, sustainable development and international politics of a future ice-free Arctic

HORIZON-CL6-2027-02-CLIMATE-01-two-stage: Open topic: Innovative solutions for the Water Resilience Strategy

HORIZON-CL6-2027-02-FARM2FORK-03: Microbiome for terrestrial livestock sustainability and health within a One Health approach (*microbiome-based solutions*)

2025-2026 Joint Call

# Restoration of ecosystem functioning, integrity, and connectivity

*#BiodivConnect*

## Scope of the call



This call is focused on fostering **innovative research to be integrated into nature restoration practices for interconnected and well-functioning ecosystems and habitats**, with special consideration for **long-term sustainability and future-proofing of restoration efforts** across spatial scales, including their evaluation.

The call covers restoration efforts for biodiversity in **all types of ecosystems and habitats, in all regions of the world**, encompassing all realms (terrestrial, marine, coastal and freshwater). supporting high-quality research and innovation projects on biodiversity and ecosystem restoration with **holistic, systemic, and integrated approaches**.

Projects that will be proposed under this call can focus on a **wide range of aspects**, e.g.: different categories of indicators, multiple scales for restoration upscaling; ecological, socio-economic, and socio-cultural dimensions; and/or varying levels of environmental regulations and policies needing alignment.

They will be expected to demonstrate **academic excellence** with potential for **societal and policy impact** regarding biodiversity, aiming to connect science, society, policy, and practices for efficient and sustainable nature restoration.

**Topic 1: Setting restoration targets and measuring success**

**Topic 2: Scaling and transferability of nature restoration efforts**

**Topic 3: Long-term sustainability of restoration efforts**

