

# RESEARCH & INNOVATION KEY DRIVER OF THE BIODIVERSITY STRATEGY

May 2020

The **EU Biodiversity Strategy for 2030** will put Europe's biodiversity on the path to recovery by 2030, for the benefit of people, climate and the planet and is a cornerstone of the **European Green Deal**. With the 'do no harm' vision, all EU policies will become more biodiversity-friendly, focusing on the sustainable use of ecosystems, supporting recovery, and bringing jobs and sustainable growth.

## THE ROLE OF RESEARCH AND INNOVATION

EU research and innovation (R&I) is key to achieving the Biodiversity Strategy goal of healthy and resilient ecosystems by 2030. It enables a transformational change that engages all sectors of European society and economy. Investing in research, innovation and knowledge exchange worldwide is key to collect the most useful data and develop the best nature-based solutions.

### HORIZON 2020

In 2020, the **Green Deal Call** (under preparation), will include several biodiversity-relevant topics, notably one on **ecosystems restoration**.

### > €2.6 billion

EU investments in biodiversity-related research under Horizon 2020 represent 5% of the programme

> **70 cities** involved in Horizon 2020 nature-based solutions demonstration projects

### HORIZON EUROPE

**Cluster 6 'Food, Bioeconomy, Natural Resources, Agriculture and Environment'** will include a **long-term strategic research agenda for biodiversity**.

One of Horizon Europe's objectives is **halting biodiversity decline and restoring ecosystems** by focusing on:

- **Understanding & addressing Biodiversity decline**
- **Assessing, Valuing and Restoring Ecosystems and Natural Capital**
- **Connecting research for better policies**
- **Nature-based Solutions**
- **Transformative Change**
- **Biodiversity and human health**

The **European Partnership on Biodiversity** 'Rescuing biodiversity to safeguard life on Earth' will support better implementation of biodiversity R&I across funders in Europe, bridging the gap between science, policy and practice, monitoring biodiversity, and making nature-based solutions a reality on the ground.

“Today more than ever, we feel the urgency of bringing nature back into our livelihoods. The Biodiversity Strategy sets the course for a transformation in which research and innovation contribute to finding nature-based innovative solutions to societal challenges.”

Mariya Gabriel, EU Commissioner for Innovation, Research, Culture, Education and Youth



## Selection of Horizon 2020 projects contributing to the EU Biodiversity Strategy for 2030



### BUILDING THE EUROPEAN PARTNERSHIP ON BIODIVERSITY

**BIODIVERSA3** is the EU network of research ministries and funding agencies **promoting a common, forward-looking vision for overcoming fragmentation in biodiversity research**. Along with environmental ministries, they prepare the future European Partnership on Biodiversity and its Strategic R&I Agenda under Horizon Europe.



### INSECTS AND POLLINATORS

**BIG4** studied the four largest insect groups to **tackle hotspots of the largely unknown insect diversity to better comprehend its potential for economic and societal needs**. BIG4 employed a wide spectrum of modern, innovative approaches to unveil the tree of life for several insect lineages.



### MARINE ECOSYSTEMS

**SponGES** is assessing the biodiversity contained within sponge grounds ecosystems of the North Atlantic, and **developing an integrated ecosystem-based approach to preserve and sustainably use marine resources**.



### SOILS

**INSPIRATION** developed a strategic research agenda related to land and soil, to keep providing essential ecosystem services and **begin reversing biodiversity loss related to land use**.



### GREENING URBAN AREAS

**URBAN GreenUP** is demonstrating how **re-naturing cities can help mitigate climate change risks**, increase the resilience to climate change effects and improve air quality.



### PROTECTING NATURAL AREAS

**ECOPOTENTIAL** developed tools to **connect Earth observation techniques with field measurements to study ecosystems and better manage protected areas** such as National Parks, UNESCO World Heritage and Natura2000 sites, and marine ecosystems.



### RESTORING FRESHWATER ECOSYSTEMS

**AMBER** develops tools, models, and toolkits that allow hydropower companies and river managers to **maximize benefits and minimize ecological impacts**. The aim is to achieve a more effective and efficient restoration of stream connectivity.



### FISHERIES

**MEESO** will create new **knowledge and data to sustainably use the mesopelagic zone**, at depths between 200 and 1,000 metres below the ocean's surface, which could contain a total fish biomass that is 100 times the annual catch of all existing fisheries.



### NATURE-BASED SOLUTIONS

**NATURVATION** Nature-Based Solutions Atlas and Navigator prototype will assist decision-makers in the path towards a more **effective implementation of nature-based solutions**.



### VALUING NATURE

**MAIA** and **WE VALUE NATURE** are **mainstreaming the use of natural capital accounting** among Member States and businesses.

More information on the projects funded by Horizon 2020 is available at [cordis.europa.eu](https://cordis.europa.eu)

