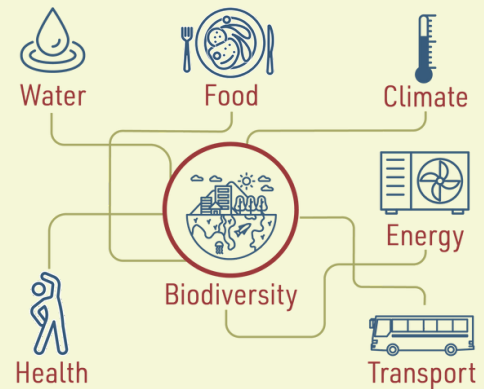


# The biodiversity nexus

The biodiversity nexus demonstrates the diverse, intertwined relationships between people and nature. It shows how our resource use affects nature and biodiversity and vice versa. The nexus covers the elements of water, food, climate, energy, transport, health and biodiversity.

## Why does it matter?

Biodiversity has a substantial role in food production and consumption, water quality and availability, climate regulation and mitigation, human and ecosystem health, energy production and means of transportation. Understanding these interlinkages provides critical evidence for decision-making and thus ways to improve biodiversity, climate change and human well-being.



## Biodiversity's impact on climate, food, water, energy, transport and health and vice versa

1. Human activities (acting through the other nexus elements) negatively impact biodiversity through:
  - Land or water use and change
  - Land or water degradation
  - Climate change
  - Direct fatalities from collisions

2. Biodiversity negatively impacts human activities associated with the other nexus elements through:
  - Competition for land
  - Vector-borne diseases
  - Invasive alien species

3. Biodiversity and the other nexus elements can co-benefit each other through:
  - Biodiversity-friendly management
  - Ecosystem protection
  - Ecosystem restoration
  - Green & blue infrastructure
  - Sustainable & healthy diets

## Sources and more information

- [www.bionext-project.eu/about-nexus](http://www.bionext-project.eu/about-nexus)
- Kim et al. 2024. Understanding the role of biodiversity in the climate, food, water, energy, transport and health nexus in Europe. *Science of the Total Environment* 925. <https://doi.org/10.1016/j.scitotenv.2024.171692>