



NATURVATION
cities – nature – innovation

URBAN NATURE NAVIGATOR

Discovering the Potential of Nature-Based Solutions



KEY POINTS

- The Urban Nature Navigator is a tool that helps users to assess the potential contributions of different types of nature-based solutions to meet various urban sustainability challenges.
- It generates information on how different types of nature-based solutions benefit ecological, socio-cultural and economic factors.
- Users can explore how a specific nature-based solutions can contribute to address urban sustainability challenges.

ABOUT THE PROJECT

NATURE-based URban innovATION is a 4-year project involving 14 institutions across Europe in the fields of urban development, geography, innovation studies and economics. We are creating a step-change in how we understand and use nature-based solutions for sustainable urbanisation.





What is the Urban Nature Navigator?

The Urban Nature Navigator (UNN) is an online tool that helps users assess the potential contributions of different types of nature-based solutions to meet various urban sustainability challenges. The tool is based on indicators that capture the ecological, social, cultural and economic benefits of nature-based solutions.

Together with the involvement of diverse stakeholders, the tool can be used to:

- Create an estimate of how a particular urban development idea could contribute to address urban sustainability challenges.
- Support users in identifying which types of nature-based solutions can help meeting key priorities.

The assessment process may be implemented with a small group of colleagues or with a wider group of stakeholders to create a city development vision, draft an urban development plan or to carry out an initial impact assessment of nature-based solutions.

Purpose

The aim of the Urban Nature Navigator is two-fold: it is designed to help in *exploring* or *examining* the contributions that nature-based solutions can make towards meeting urban sustainability challenges.

More specifically, it can support:

- *Exploring* how specific policy priorities and urban sustainability goals can be addressed by different types of nature-based solutions.
- *Examining* how specific types of nature-based solutions can contribute to addressing multiple sustainability goals in defined places or communities.

Three user levels

In order to provide a means for comparing and benchmarking, the tool can be used at three levels – *Bronze*, *Silver* and *Gold*.



Bronze

The Bronze Level provides a snapshot of how different nature-based solutions can contribute to addressing urban sustainability challenges. The benefits of different nature-based solutions can be explored generally or examined in more detail with the help of multiple indicators.



Silver

The Silver Level enables the identification of the benefits and the trade-offs of different nature-based solutions together with a set of decision-processes. This is suitable for participatory processes in which diverse groups of stakeholders can prioritize urban sustainability challenges.



Gold

The Gold Level is a guide to a set of tools that can be used in local contexts to generate values of nature-based solutions in high resolution or across cities. The outcomes make it possible for generate data about the specific form of nature-based solutions under consideration.



How to use the Urban Nature Navigator?

The UNN supports users in discovering the contribution of six different types of nature-based solutions (see below) towards the urban sustainability challenges of a specific city, district or neighbourhood.

- | | |
|--|--|
|  Parks and green areas |  Blue Areas |
|  Allotments gardens |  Infrastructure with green features |
|  Green areas for water management |  External building greens |

The urban sustainability challenges included in the Urban Nature Navigator (see below) are based on the **Sustainable Development Goals** developed by the United Nations, focusing on those that are particularly relevant for achieving urban sustainability and working with nature in cities.

- | | |
|---|---|
|  Climate action for adaptation |  Health and well-being |
|  Coastal resilience |  Inclusive governance |
|  Cultural heritage and diversity |  Regeneration and land use |
|  Economic development |  Social justice and cohesion |
|  Environmental quality |  Sustainable consumption |
|  Green space and biodiversity |  Water management |

Users of the Urban Nature Navigator can start the assessment with a set of priorities and see which types of nature-based solutions might be able to help them reach their goals (*explore mode*) or if there is already a specific plan or project idea in place for working with nature, the tool can help identify the multiple benefits this plan or project could create (*examine mode*).

Types of Nature Based Solutions		Parks and green areas	Green related to infrastructure	Blue areas	External building greens	Allotment gardens	Green for water management	
Urban sustainability challenges								
Health and well-being		●	●	●	●	●	●	
Social justice and cohesion		●	●	●	●	●	●	
Inclusive and equitable governance		●	●	●	●	●	●	
Economic development and employment		●	●	●	●	●	●	
Sustainable production and consumption		●	●	●	●	●	●	
Cultural heritage and diversity		●	●	●	●	●	●	
Water management		●	●	●	●	●	●	
Environmental quality (air, waste)		●	●	●	●	●	●	○ = 1
Regeneration or development of land use		●	●	●	●	●	●	○ = 2
Green space, habitats and biodiversity		●	●	●	●	●	●	○ = 3
Climate adaptation or mitigation		●	●	●	●	●	●	○ = 4
Coastal protection		●	●	●	●	●	●	○ = 5

The dots in the matrix represent average scores, i.e. averages of normalised indicator scores. For the blank space no score is available.



In the explore mode, users should start by identifying the urban sustainability challenges that their community or city is currently facing and they aim to address. The assessment results are given in the form of a matrix with impact scores (ecological, social, cultural and economic benefits) for nature-based solutions.

The scores range from 1 (very low contribution) to 5 (very high contribution), and they represent the averages of indicator scores. A matrix helps to understand which types of nature-based solutions have higher contributions to the identified sustainability challenges, and which represent the highest positive outcome for reaching that goal.

In the examine mode, users should select a specific example from the six types of nature-based solutions included in the Urban Nature Navigator, and also an urban sustainability challenge that is relevant. As a result, indicator scores of multiple benefits are presented in a set of diagrams for the selected type of nature-based solution. These scores represent the relative contribution of that specific type of nature-based solution towards the selected challenges, where each indicator is scored from 1 to 5. The diagram allows users to obtain insight into the benefits to society of nature-based solutions in relation to a diverse range of sustainability challenges.

What are the outputs of the Urban Nature Navigator?

The UNN generates information on how different nature-based solutions perform on key environmental, socio-cultural and economic indicators. As outputs it offers:

- Generation of diagrams, which show the overall contribution of a type of nature-based solution towards a range of sustainability challenges.
- Economic values of the overall benefits provided by the nature-based solutions.
- Access to a matrix, which shows average scores across indicators for different urban sustainability goals and for different types of nature-based solutions.
- Suggestions of participatory and deliberative processes that can be applied jointly with stakeholders during the assessment process of nature-based solutions.
- A guide to methods for assessing benefits from NBS using local context information