



# Ensuring the quality of nature-based solutions: Perspectives of key stakeholder groups



## Objectives

This Knowledge Brief produced by NetworkNature aims to explore and analyse different perspectives and perceptions of high-quality nature-based solutions (NBS). The brief provides an overview from key stakeholder groups and draws recommendations for practitioners and policy-makers on how to ensure the quality of NBS interventions.

In preparation of this knowledge brief, interviews with representatives of key stakeholder groups - including youth organisations, investors, landowners and nature-based enterprise representatives - have been a major contributing source.

The brief concludes with opportunities and ways forward for practitioners and policy-makers.

## Who should read this?

In order to provide relevant insights and recommendations for ensuring the quality of NBS interventions, this knowledge brief is intended for practitioners, directly involved in the development and implementation of NBS across all ecosystem types, as well as policy-makers.

# Introduction

Achieving the [2050 vision of the United Nations of Living in Harmony with Nature](#), requires a holistic approach to climate and biodiversity issues and the development, through an inclusive process, of comprehensive solutions capable of benefiting nature, people and the economy.

Nature-based solutions are one of the most promising pathways to tackle the current interlinked environmental crises, while delivering on international goals. Upscaling NBS would speed up the transition to a greener socio-economic model and support the society in avoiding and tackling the adverse impacts of the climate change and biodiversity loss.

Besides the clear environmental upsides, large scale deployment of NBS would also immensely benefit the global economy. It is estimated that each dollar invested in restoring degraded land can bring an economic return of 7-30 dollars ([Verdone, Seidl, 2017](#)), and that redirecting the yearly environmental harmful subsidies to nature positive employment could create 395 million jobs ([WEF, 2020](#)). Furthermore, recent studies showed that NBS focused on climate would not only reduce drastically GHG emissions but could also result in USD 170 billion in global benefits in ecosystem services ([IUCN](#)).

However, without adhering to proper principles and criteria, there is a real risk for NBS to be misused, either intentionally or unintentionally, resulting in diminished environmental and social benefits. Clear guidelines on how to implement NBS are needed to ensure their meaningful impact and to refrain from a misunderstanding of the term. Being a relatively recent concept, the term nature-based solutions has been misused on several occasions. Certain stakeholders have (purposefully) disregarded science-based criteria and taken advantage of the theoretical and practical lack of clarity surrounding the term. Thus, critics of nature-based solutions have been calling NBS a “dangerous distraction” ([Melanidis, Hagerman,](#)

[2022](#)) and expressed their fear that without strong standards, NBS would allow harmful business-as-usual practices to be labelled as sustainable. To mitigate these concerns, several experts are currently working on a better operationalisation of the term for both policy and practice, also through the development of comprehensive criteria.

An important step in this direction was taken at the United Nations Fifth Environment Assembly in March 2022, where governments agreed on a definition of nature-based solutions. NBS are thus described as “*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 and resilience and biodiversity benefits.*” The wording is largely based on IUCN’s definition of 2016 and overall reflects the understanding of the European Commission’s one of 2015. Together with the existing guidelines, such as those proposed by the Nature-based

Solutions Initiative, and standards, e.g. the [IUCN Global Standard for Nature-based Solutions](#), the definition is a fundamental building block for the inclusion of NBS in policy.

Nevertheless, significant gaps on the development and deployment of NBS are still present. NetworkNature has recently compiled a knowledge gap database available [here](#). Most of the identified shortcomings of academic literature on NBS can be grouped under the theme of “ensuring quality”. Although the existing body of literature is key in providing practitioners with a set of criteria to guide implementations, there is the need to translate these principles into globally recognised and applicable standards.

Practitioners are faced with the challenge of ensuring the high quality of their NBS interventions, translating standards into action, while securing financial support for doing so. Policy makers play a key role in regards to this aspect as they can generate an appropriate framework for guaranteeing effective implementation of NBS by practitioners.

# What is intended with high-quality nature-based solutions? How can it be defined and translated into standards?

In order to respond to these questions, NetworkNature launched the semester theme on “[Nature-based solutions and standards](#)”. A dedicated desk research and stakeholders’ consultation have shed light on this topic.

This knowledge brief, through the interviews carried out with key stakeholder groups, provides additional views on relevant principles and criteria to be considered for NBS, as means to avoid misuses and improper implementation, and opportunities for standardisation.

## Identifying NBS misuses

The NetworkNature semester theme review identified several potential misuses of NBS. The most significant ones referred to greenwashing, biodiversity offsetting resulting in reduced efforts to act on primary drivers, issues with social justice and distribution of benefits, and land displacements.

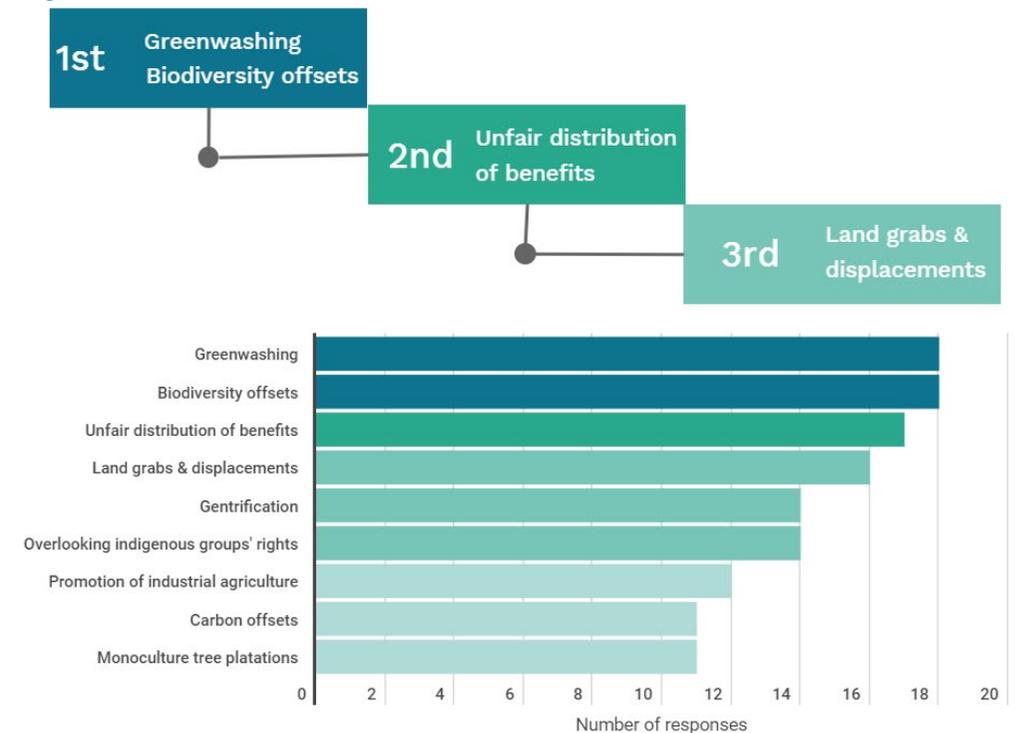
An NBS survey recently launched by youth organisations<sup>1</sup>, which was translated into the [Global Youth Position Statement on Nature-based Solutions](#), confirms the risks and misuses of NBS defined above. In particular, the loss of ecosystem integrity as structure and functions was identified as the most worrying risk associated with NBS. Further, the lack of a meaningful participation by local communities and indigenous people was found to contribute to the risk of overlooking certain rights.

It was mentioned that a specific focus on climate and offsetting could contribute to disregarding nature, and fail to account for biodiversity, which is a pre-requisite for NBS. Such strong focus on climate, as compared to biodiversity loss, is a reality also in the context of land uses, with many private landowners/managers considering the former as a more important issue than the latter, stressing the need to further communicate the role that NBS can play in addressing climate-related risks on land, while – by definition – protecting and enhancing biodiversity.

Nature used as a greenwashing tool by polluters was also mentioned with high priority by youth organisations, calling out for the need of learning from past failures where greenwashing has materialised.

In addition, businesses and SMEs are increasingly becoming active in nature-based approaches. However, research conducted within the ConnectingNature project, in relation to the [ConnectingNature](#)

**Figure 1 - Stakeholders’ views on relevance of NBS misuses**



[Enterprise Platform](#), has showed a lack of awareness among many small businesses around NBS terminology. Practitioners are more familiar with industry specific terminology and national standards such as those for green buildings or regenerative agriculture. Nature-based enterprises showed a high level of awareness of ‘greenwashing’ among some industry practitioners and were highly supportive of the need for finding solid ways to avoid such backlashes, by safeguarding the definition of NBS.

## Defining NBS principles and criteria

Defining principles and criteria is crucial to eliminate the abovementioned risks and misuses and ensure the high-quality of NBS intervention. Through a stakeholders’ consultation, NetworkNature has identified the main criteria to be considered for NBS quality, grouped into four themes which reflect the features considered most important for high-quality NBS: objectives, design, implementation, and post-implementation.

In line with the NetworkNature findings, youth groups have highlighted the need to ensure the safeguard of ecosystem services, biodiversity, and ecosystem integrity where NBS are implemented. In particular, “sustainable use of ecosystem services and biodiversity” and “biodiversity conservation and ecosystem integrity” were the priority criteria identified in the abovementioned survey. Further, criteria for high-quality NBS should reflect their contribution to climate change adaptation and mitigation, as well as sustainable development objectives, while protecting the rights of local communities and indigenous people.

provide (e.g. soil health, water quality) as marketable services, so as to help show conservation as an economically viable land use. Highlighting the economic benefits of land conservation (e.g. revenues from ecosystem services) can make nature an economic sector in its own right. For instance, an average of \$350 billion expected to be generated in ecosystem services by protecting land and oceans ([Campaign for Nature, 2018](#)).

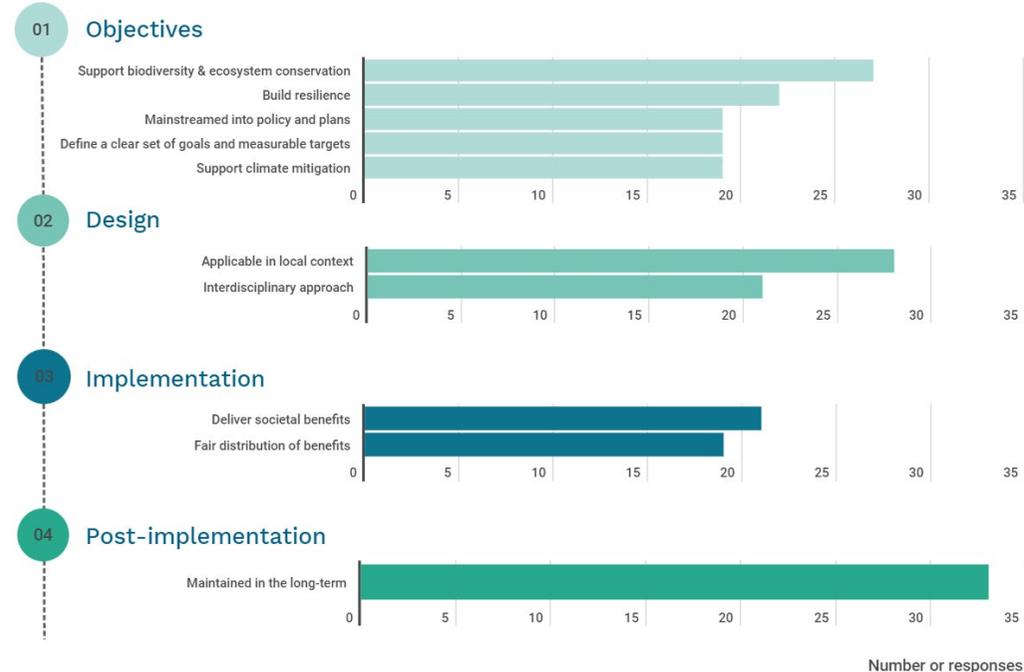
As regards to nature-based enterprises, two main criteria are considered important, namely ensuring proper co-creation and community engagement for such interventions, so as to build long term community support and involvement in maintenance and governance, and the availability of measurable outcomes of NBS interventions, in specific net-gain of biodiversity impact.

Capacity to measure impact has been identified as one of the main barriers for the uptake of NBS from investors’ perspective. Lack of knowledge on how to measure impacts as well as lack of necessary tools and metrics contribute to such barrier. This is particularly challenging for small companies which may fail to keep up with latest developments. Further, investors are generally interested in having short-term impacts measured, which does not reflect the nature of NBS, where most of the solutions are long-term.

From an investor’s point of view, the financial aspect of NBS interventions is the priority, ensuring that the project goes beyond a concept or idea, developing into a well-defined proposal, including a clear revenue stream, and the identification of the main stakeholders involved. The inclusion in the project’s budget of stakeholders on the ground driving the project is also considered of crucial importance for demonstrating the feasibility and efficacy of the proposed project. Such entities are often missing as financing is not secured for them.

Economic viability was also identified as a priority criterion for private landowners. Stakeholders from this group have stressed the importance of making the ecosystem services they

**Figure 2 - Main principles and criteria of NBS quality per theme**



## Understanding NBS standardisation needs

Standardised approaches to NBS contribute to a common understanding of what NBS should be and their potential benefits. The NetworkNature expert consultation identified elements considered priority for NBS standardisation.

The stakeholders' interviews have confirmed the benefits of NBS standards. For instance, for investors, guidance is needed to assess the quality of NBS. For this reason, standards for nature-based solutions interventions are seen as necessary to confirm the quality and legitimacy of the projects on which they are investing.

However, views from key stakeholder groups also show a strong belief that the development and application of standards for NBS should go beyond the current practice, and reach a broader audience.

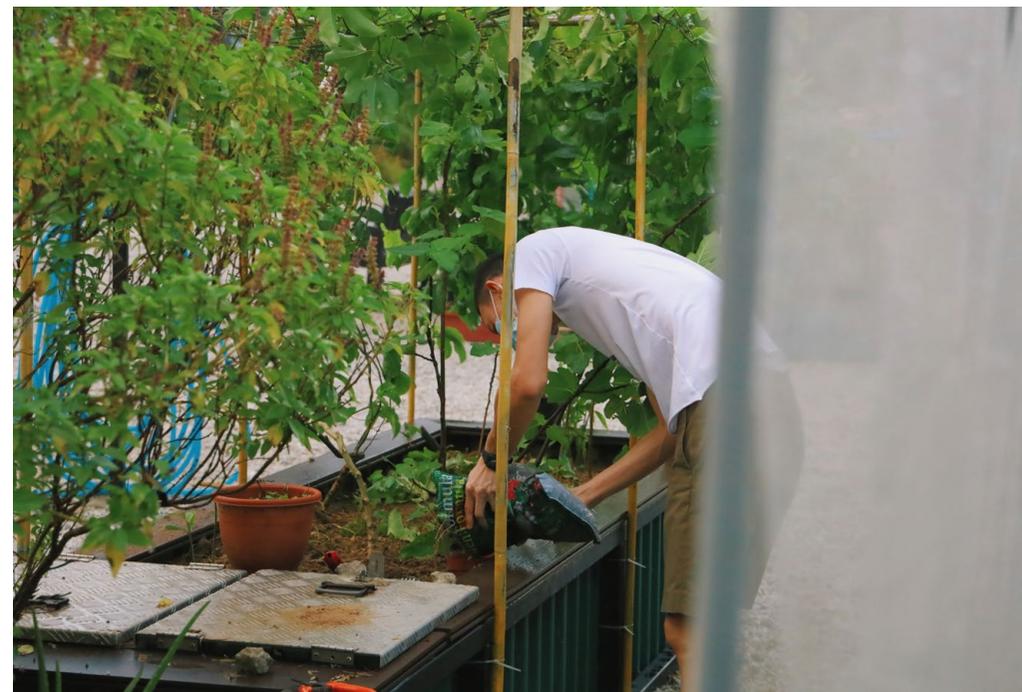
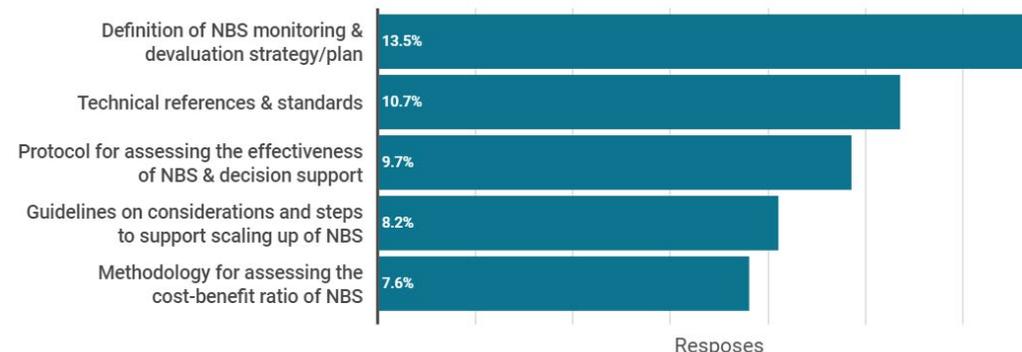
To clarify the NBS concept, the [IUCN Global Nature-based Solutions Standard \(IUCN 2020\)](#) already elicits eight criteria to frame green/blue interventions as NBS actions, hence providing guidance and

quality assurance for those seeking to implement NBS on the ground. Furthermore, additional work is being undertaken at the CEN/CENELEC Standardisation body to ensure the appropriate standards reach the market to fulfil the needs expressed. The experts from the NetworkNature Semester theme are also involved in the process and will continue to take learnings from the semester further into the formalised standardisation bodies work.

According to youth groups, the application of standards should not stop with governments but rather reach also the stakeholders involved in the implementation of NBS, keeping ecosystems integrity as the main priority. A general preference for legally binding safeguards for NBS was expressed, to be defined at a global level.

The ambition of extending standards to practitioners was also mentioned in the context of nature-based enterprises. In particular, working more closely with existing industry practitioner bodies can help to develop sub-sector NBS specific criteria for those industry sectors.

**Figure 3 - Priority elements for NBS standardisation**



# Recommendations

The analysis provided in this knowledge brief has helped draw key recommendations for practitioners and policymakers for enabling cross-sectoral efforts towards the implementation and upscale of high-quality NBS.

## For practitioners

### Ensuring the financial viability and clear revenue stream of NBS projects

In order to secure funding, projects should go beyond simple concepts and provide clear information on the revenue stream and on all stakeholders involved, including entities on the ground. A [practical guide on access to finance for conservation and nature-based solutions](#) is available from the EIB.

### Exploring opportunities arising from the EIB Natural Capital Facility

The [EIB Natural Capital Facility](#) focuses on adaptation to climate change and promotion of biodiversity, showing significant opportunities for NBS projects. In addition, the EIB focuses on long-term investments for long-term impacts, which reflect the nature of NBS.

### Ensuring social acceptance of NBS interventions through co-creation and community engagements

Co-creation and community engagement activities are strongly encouraged for NBS interventions to ensure that such solutions are well perceived and not “imposed” on affected communities, making such projects also more attractive to investors. In particular, NBS projects should effectively involve local communities, including indigenous people. An online NBS co-creation guide is currently being developed by the NetworkNature TF6 on Co-creation and Co-governance. More information on the work of the TaskForces is available [here](#).

### Finding a balance between biodiversity and climate objectives

Biodiversity protection is the pre-requisite of NBS interventions and should therefore be the main

objective of the planned interventions. Climate related risks are key societal challenges that can be addressed by NBS and a link to such challenges should be made, while avoiding a too strong focus on carbon offsetting that may lead to greenwashing risks. The Nature-based Solutions Initiative has released [a response to greenwashing](#), on the misuse of nature-based carbon offsets.

### Measuring NBS outcomes

NBS are associated with benefits and co-benefits, as well as costs. Ensuring the measurability of such outcomes is crucial for demonstrating the potential/success of specific NBS interventions, and for getting investors interested. A [Handbook for practitioners on evaluating the impact of NBS](#) was produced by the EEA, the JRC and 17 EU NBS projects providing a comprehensive NBS impact assessment framework. Further efforts are ongoing to improve the evaluation of NBS outcomes.

### Creating a hub for NBS implementation

Successful inspiring examples of NBS interventions in different ecosystems and scales can help convince different stakeholders in engaging in similar solutions, while also allowing them to access reliable information and advice on which NBS are feasible to implement in specific contexts. NetworkNature provides a continuously growing [repository of case studies on NBS interventions](#), gathering inputs from different stakeholders of the NBS community.

## For policymakers

### Exploring legally binding safeguards for NBS

Legally binding safeguards for NBS should be defined at global level, building on the internationally approved definition of the 5<sup>th</sup> UN Environment Assembly, providing guidance and criteria for implementation, ensuring a balanced focus on biodiversity and climate, and complementing the IUCN NbS Global Standard.

### Simplifying the bureaucratic burden for NBS implementers

Bureaucracy may pose barriers for the implementation of NBS, especially for indigenous people, women and youth. Access to funding remains challenging for these groups which represent key implementers of NBS on the ground for biodiversity conservation and climate adaptation/mitigation. A simplification of the bureaucratic burden would represent a key enabler for NBS implementation.

### Strengthening targeted awareness raising and knowledge sharing activities on NBS among specific groups

Many stakeholder groups have highlighted the need for more information sharing on NBS, targeted

to their needs. Strengthening awareness raising activities targeting different sectors and groups can address the existing challenges to implementation of high-quality NBS and encourage the involvement of other (less common) actors. In particular, the private sector is increasingly involved in the delivery of nature-based solutions. As the market grows attracting new entrants, it is essential that awareness and adherence to NBS quality standards are observed. Practitioner platforms such as the [Connecting Nature Enterprise Platform](#) are led by industry practitioners who seek to raise awareness of standards and good practices across different types of NBS.

### Establishing changes in public procurement procedures

Public procurement procedures currently do not account for differences between nature-based and conventional grey solutions. Public procurement for NBS should be designed to consider the long-term nature of such solutions and the need of a co-creative approach

*“Standards for nature-based solutions interventions are crucial to reassure investors of the quality and legitimacy of the projects on which they are investing”*

Stephanie Lindenberg, European Investment Bank

*“The implementation of NbS needs to be feasible with the economic reality of the landowner, if not financial compensation on the long-term is needed.”*

Anne-Sophie Mulier, European Landowners Organisation

*“Standards are a great starting point, but we need global legally binding safeguards ensuring biodiversity conservation and the respect of people’s rights, especially IPLCs”*

Mirna Ines Fernandez, GYBN

*“It is important to make sure that the voices of businesses are equally reflected in the discussions on standards and quality assurance development. There is a risk that the new standards will not take into account the perspective of small enterprises”*

Siobhan McQuaid, Connecting Nature Enterprise Platform



With the contribution of the [European Investment Bank \(EIB\)](#), the [European Landowners Organisation \(ELO\)](#), the [Global Youth Biodiversity Network \(GYBN\)](#) and [Horizon Nua](#) as founder of the [ConnectingNature Enterprise Platform](#).

NetworkNature aims to provide a bridge between the European policy landscape and the NBS community, with the overarching objective of maximising the impact and spread of nature-based solutions.

Through its regular activities, gathering knowledge and experience, engaging stakeholders and providing guidance, capacity building and creating opportunities for cooperation, NetworkNature aims to support the recommendations provided in this Knowledge Brief.

The Knowledge Brief was produced by IUCN within NetworkNature with contributions from Stephanie Lindenberg (EIB), Anne-Sophie Mulier (ELO), Mirna Ines Fernandez (GYBN), and Siobhan McQuaid (Horizon Nua and Connecting Nature Enterprise Platform).

Recommended citation: Gionfra, S.; Demozzi, T.; Sheikholeslami, D.; Núñez Rodríguez, M. (2022) Ensuring the quality of nature-based solutions: Perspectives of key stakeholder groups. Knowledge Brief drafted by IUCN for NetworkNature (H2020 project No. 887396).

- ➔ [Networknature.eu](https://networknature.eu)
- ✉ [hello@networknature.eu](mailto:hello@networknature.eu)
- 🐦 [NetworkNatureEU](https://twitter.com/NetworkNatureEU)
- 🌐 [NetworkNature](https://www.linkedin.com/company/networknature)
- 📺 [NetworkNature](https://www.youtube.com/channel/UCv3v3v3v3v3v3v3v3v3v3v3)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 887396.

