



**Nature
based
Solutions**

The nature of progress

Concept and science of Nature-based Solutions: Unlocking its potential to address climate change

UNFCCC Standing Committee on Finance Forum on Financing Nature-based Solutions

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15 October 2021

What are Nature-based Solutions (NbS)?

Nature-based solutions are: *“actions to protect, sustainably manage and restore natural or modified ecosystems, that address societal challenges (e.g. climate change, food and water security or natural disasters) effectively and adaptively, simultaneously providing human well-being and biodiversity benefits”*

- Unanimously adopted by 1,400+ IUCN members (states, government agencies, international/national NGOs and IPOs)
- Represents the most widely-used definition globally
- Cited by IPCC and IPBES in 2021
- Cited in 2000+ peer reviewed articles in recent years



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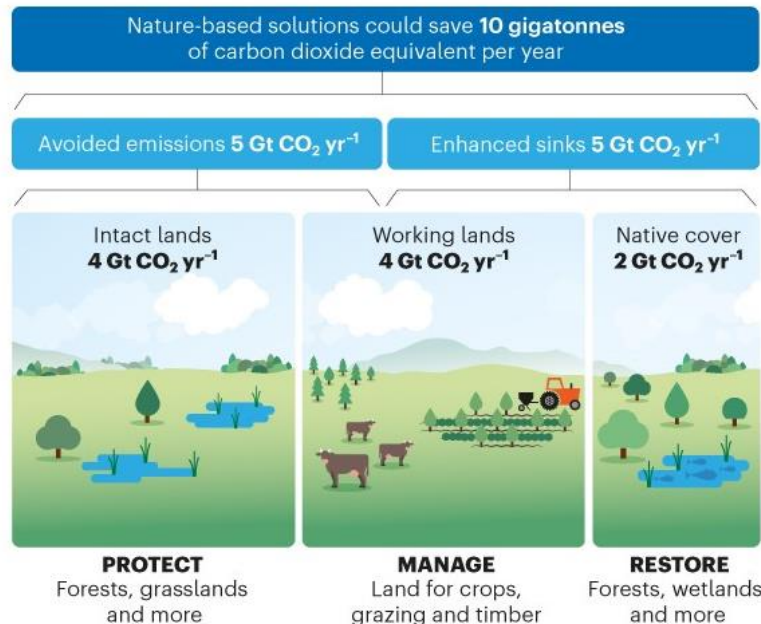
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NbS for Climate Change Mitigation

THREE STEPS TO NATURAL COOLING

Protect intact ecosystems, manage working lands and restore native cover to avoid emissions and enhance carbon sinks.

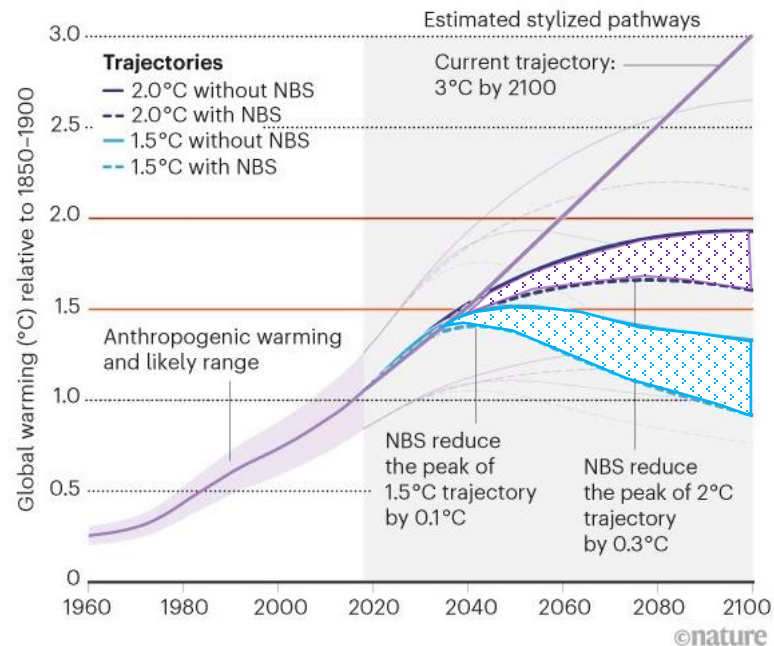


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Underlying data are in Supplementary information, Table S1.

THE LONG GAME

Nature-based solutions (NBS) could reduce the global peak temperature and suppress warming beyond 2100 — if they are ambitious and designed for longevity.



Source: Cécile A. J. Girardin, Stuart Jenkins, Nathalie Seddon, Myles Allen, Simon L. Lewis, Charlotte E. Wheeler, Bronson W. Griscom & Yadvinder Malhi. 2021. 'Nature-based solutions can help cool the planet — if we act now', *Nature*, 12 May.

NbS for Climate Change Adaptation

Mangroves → Coastal Resilience

- Mangroves provide over **\$65 billion in flood protection**, and **safeguard 15 million people against flooding per annum**¹
- Of all the world's ecosystems, mangroves are the **most effective per unit area at trapping and storing carbon**²

Green spaces → Urban Resilience

- Green spaces absorb **storm water run-off**, reduce **urban heat-island effect**, and lower **drought impacts** and **remove carbon**
- *Sponge City* – Xiamen, China
- *Green Cities, Clean Waters* – Philadelphia, USA

¹ Menéndez, P., Losada, I.J., Torres-Ortega, S., Narayan, S., & Beck, M.W. 2020. 'The Global Flood Protection Benefits of Mangroves', *Scientific Reports*, 10: 4044).

² Spalding, Mark D and Leal, Maricé (eds). 2021. [The State of the World's Mangroves 2021](#). Global Mangrove Alliance.



Growing policy uptake and recognition of NbS



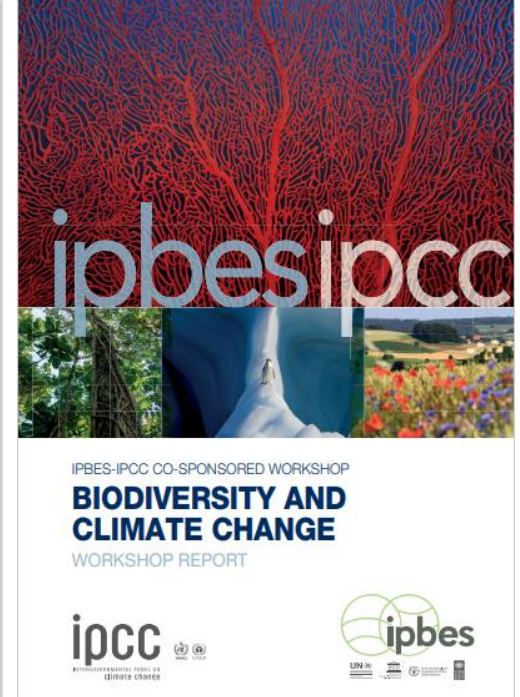
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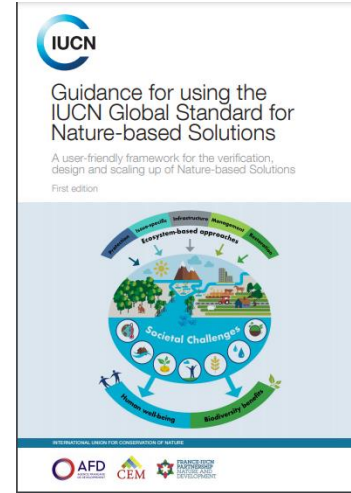
UN CLIMATE CHANGE CONFERENCE UK 2021

IN PARTNERSHIP WITH ITALY



Established best practice for NbS implementation

IUCN Global Standard for NbS™



Underpinned by four operational caveats

01

CUT EMISSIONS

02

**CONSERVE &
PROTECT EXISTING
ECOSYSTEMS**

03

**BE SOCIALLY
RESPONSIBLE**

04

**BE ECOLOGICALLY
RESPONSIBLE**

The IUCN Global Standard for NbS™



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Societal
challenges



Design at scale



Biodiversity net
gain



Economic
feasibility



Inclusive governance



Balance trade-
offs



Adaptive
management



Mainstreaming
for sustainability

- **8 Criteria and 28 Indicators** for designing (new) and assessing (existing/past) NbS
- Measured against **calibrated metrics**
- Developed with **+800 contributors** and **9 expert groups** through **2 years of public consultations**
- **Facilitative standard** to support transitioning to NbS
- Piloted across **Asia, Africa, Latin America**, and parts of **Europe**
- Translated by partners into **7 languages** so far

Assurance with 3rd Party Certification by 2022

IUCN to develop collaborative certification scheme for Nature-based Solutions

Tue, 07 Sep 2021

Marseille, France, 2021 (IUCN) – At the 2021 World Conservation Congress, IUCN unveiled a plan to develop a collaborative certification system to ensure that the changes resulting from Nature-based Solutions for Societal Challenges (NbS) are truly sustainable.



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Partnerships

- Delivery through **existing, accredited, schemes**
- Currently **six partners** on board for development phase: *Forest Stewardship Council, Gold Standard, Initiative for Responsible Mining Assurance, FairTrade International, Global Sustainable Tourism Council*

Priorities

- A **seamless monitoring, evaluation and auditing process** with recognised partner schemes
- **Accelerating uptake of NbS** through leveraging growing interests in private sector markets and finance
- **High quality and responsive technical services** through the *IUCN Global Facility for NbS*

NbS Global Facility

Develop

Investment
screening tools

NbS assurance
and certification

Design

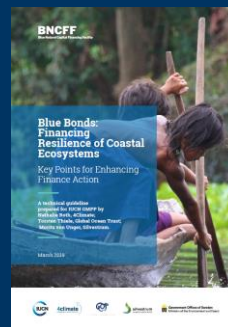
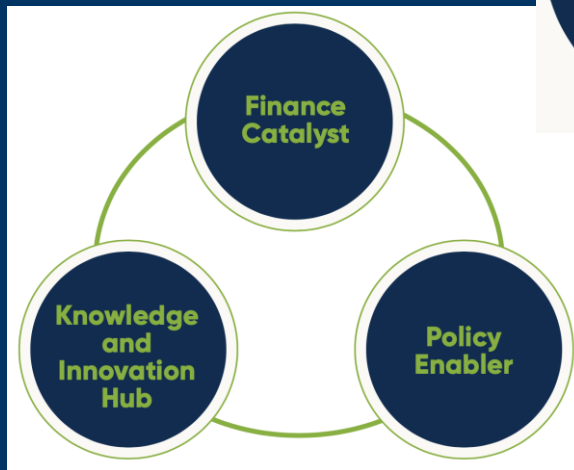
Shaping public
sector investments

Private sector
pipeline
development

Accelerate

Facilitating
mobilisation of public
funds (inc. GEF & GCF)

Catalytic & de-risking
investments for private
sector action



Several financing vehicles available for NbS

- ❖ Enhanced & innovative public sector financing – including repurposing of negative subsidies
- ❖ Innovation in restructuring and management of national debt
- ❖ De-risked private sector investments through blended finance arrangements
- ❖ Inclusive financing – increasing access to fair & competitive lines of credits for farmers & rural communities



Concluding comments



- The concept and science of Nature-based Solutions is clear, well established and builds upon 20 years of experience
- A widely accepted NbS definition and best practice exists and regularly used, including by many governments and private sector
- Several innovative finance models already established and piloted – the challenge now is to scale them up

Thank you for your attention

For more information:



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www.iucn.org/climate

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