



**Nature  
based  
Solutions**

# **UNFCCC SBSTA Research dialogue 13, 1-2 June, 2021**

**Minna Epps, Director, IUCN Global Marine and Polar programme**

02 June 2021



# NbS potential to address our societal challenges

IUCN defines NbS as:

*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.*

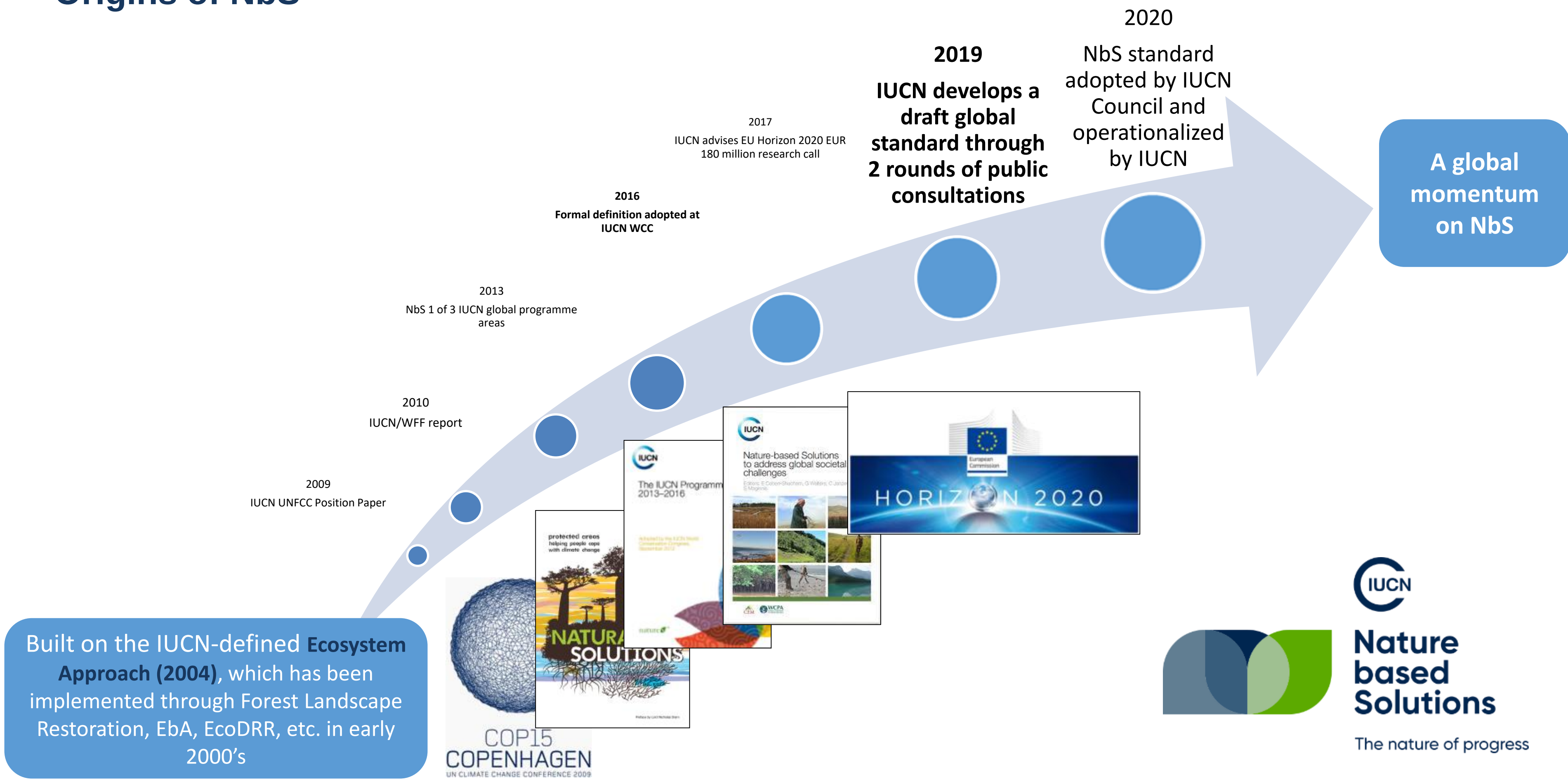
“

NbS are often described as ‘no-regret’ options, providing benefits to people in a range of scenarios

”



# Origins of NbS





# A differentiated approach



Nature-based  
solutions



Nature-derived  
solutions



Nature-inspired  
solutions

# IUCN Global Standard for NbS



Societal challenges



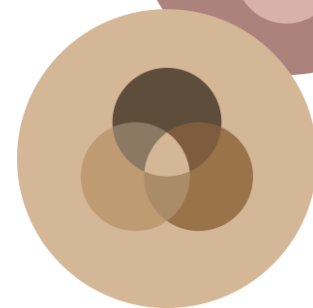
Design at scale



Biodiversity net-gain



Economic viability



Inclusive governance



Balance trade-offs



Adaptive management



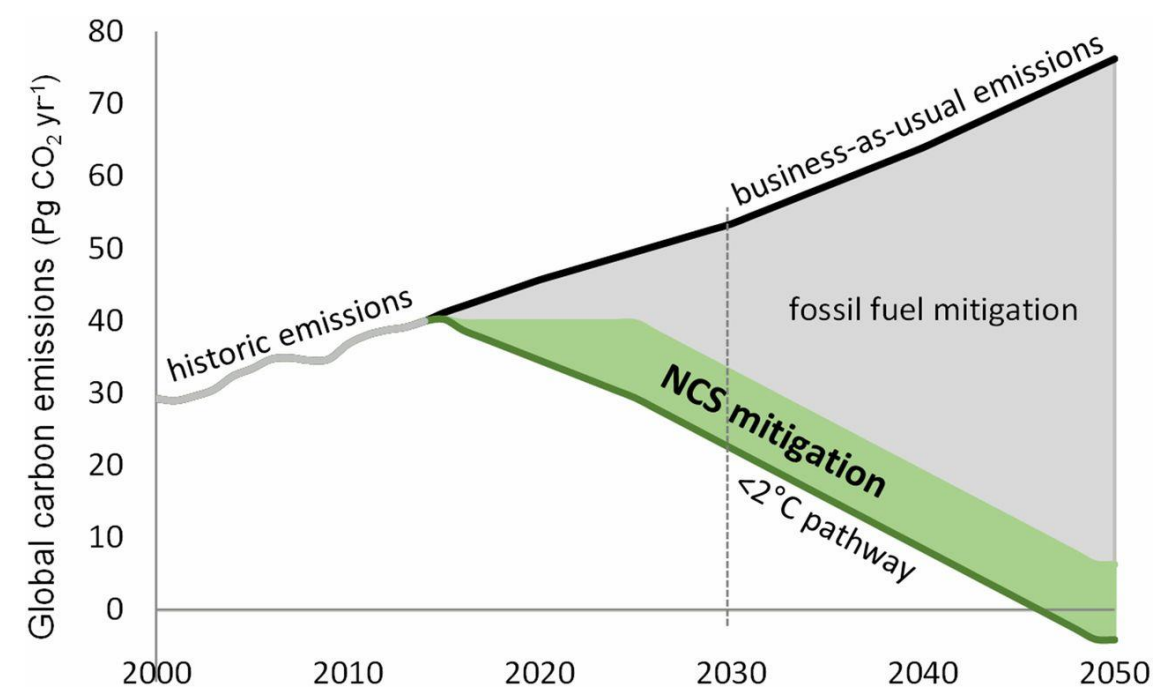
Sustainability & Mainstreaming





# Benefits of NbS from a climate mitigation perspective

Potentially over 1/3 of cost-effective climate mitigation needed by 2030 to stabilize warming below 2°C (PNAS 2017)



Land-based carbon removal, including forests, wetlands and soils, offer annual emissions reduction potential up to 12 GtCO<sub>2</sub>e (UNEP 2017)



Nature-based Solutions have a vitally important role to play in addressing both the causes and consequences of climate change





# Mangrove restoration, Philippines



- 7 community-based MPAs legalised
- Total area of **5,321 ha** (47 times larger than national average MPA size, 148 ha of mangroves)
- 1,888 ha of no-take 'replenishment' zones
- **Reduced emissions of 9,152 tCO<sub>2</sub>e yr<sup>-1</sup>** from protected mangrove area
- 260,000 tonnes of fishing nets recovered from the ocean for recycling into sportswear, fashion and flooring.
- **Regenerative seaweed farming** locally reduces coastal eutrophication and climate change-driven ocean acidification and deoxygenation
- **148 families trained**, 47 families supported to set up regenerative seaweed farming practices

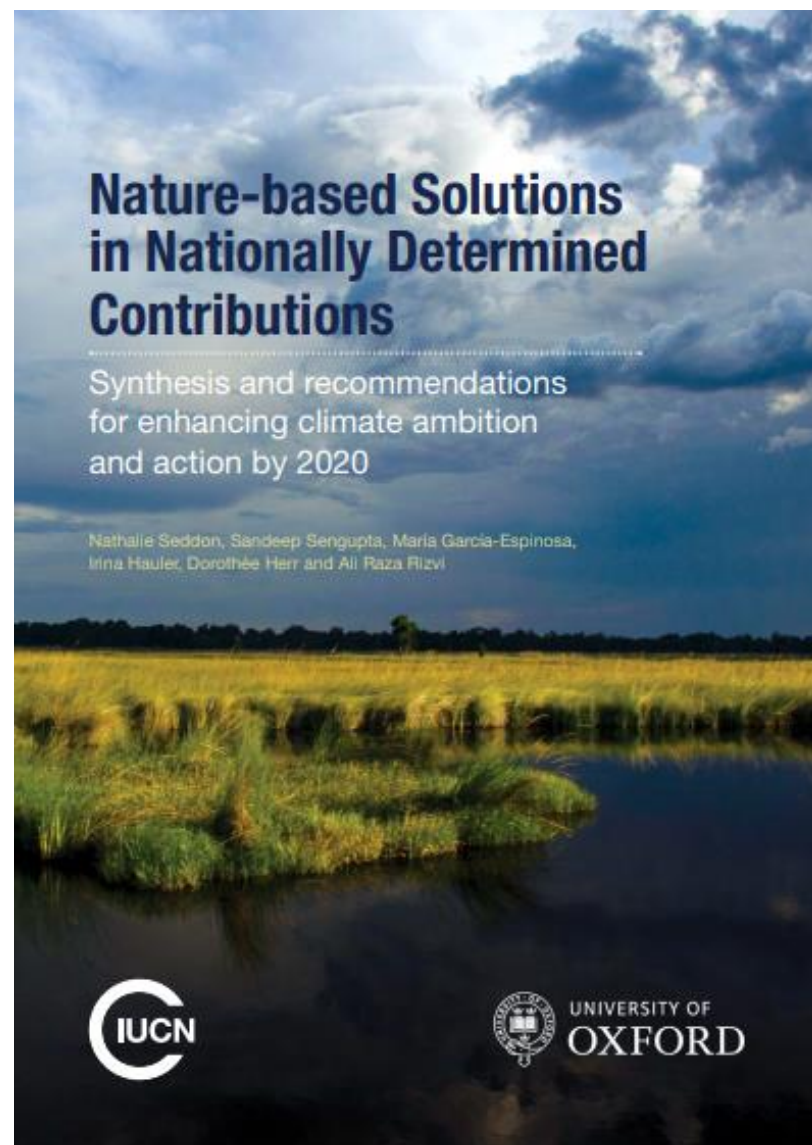




# NbS in NDCs



An overview of the 2015 level of ambition for NbS within NDCs



Based on an analysis of 10 major comparative assessments of nature's prominence in NDCs to date

Provides recommendations on how climate ambition within future NDCs can be raised through the more substantive inclusion of NbS





# Key findings (2015/16)



At least 66% of Paris Agreement signatories include NbS in one form or another to help achieve mitigation/adaptation goals

But more concrete, evidence-based targets for NbS are urgently needed

NbS that synergise adaptation and mitigation are underused





# Chile's NDC and NbS - ocean



## OCEANS

Updated

Variable	NDC 2015	NDC PAC Proposal	New NDC	Link with SDG
Management Plans	No goal.	By 2030, all marine protected areas (MPAs) created by 2020 will have management plans.	By 2030, all marine protected areas (MPAs) created by 2020, <b>and later</b> , will have management plans for MPAs (programming specified) <b>and will be under implementation.</b>	
Co-benefits		<b>The co-benefits in mitigation and adaptation will be evaluated.</b> -At 2025: Evaluation in 3 AMP. -At 2030: Implementation of metrics in 5 AMP.	The commitment to the proposal is maintained.	

Management of MPAs must be with local communities, key for sustainable development of fishing activity and vulnerable communities.



# Outlook



## 01

NbS links  
between MEAs

## 02

Better data on  
carbon capacity  
and potential  
sources

For NDCs and  
climate targets

## 03

Better data on  
vulnerability of  
NbS

For adaptation  
plans,  
socio-economic  
resilience

## 04

NbS at scale

For steering  
finance and  
investments



# More information



## Learn more



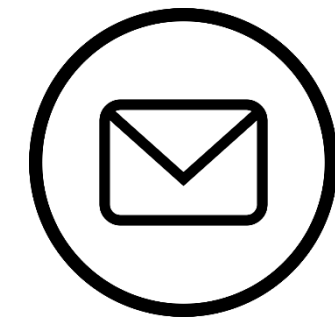
[IUCN.org/NbS](https://IUCN.org/NbS)

## Follow us



[@IUCN](https://twitter.com/IUCN)

## Contact us



[NbSStandard@iucn.org](mailto:NbSStandard@iucn.org)