

Overview and Perspectives of Nature-based Solutions in Climate and Biodiversity Governance

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Overview: NbS as a concept under discussion

IUCN Actions to protect, sustainably manage, and restore natural or modified ecosystems, that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits

EU Solutions that are inspired and supported by nature, which are cost-effective, meanwhile provide environmental, social and economic benefits and help build resilience

G20 Climate Sustainability WG Effective use of nature strengthens economic and social resilience; Mainstream NBS in urban planning and decision-making; Multi-level and multidimensional participation in NbS decision-making **Further concerns:** Promote NbS in cities for climate mitigation and adaptation; Facilitate sharing of best practices first, not yet commitment and monitoring systems; EBA might be a maturer concept

Q: Shall ecosystems be the main body of NbS?

Q: Shall NbS be mainstreamed in the governance?

Overview: NbS emerging in climate governance

NbS serves as an analytical perspective for viewing key practices and features of national climate governance

185 NDCs

- ✓ Mitigation-related NbS
 - ✓ Whether mitigation PaMs include **agriculture** and **forestry**
 - ✓ Whether **renewable energy** is included
- ✓ Adaptation-related NbS
 - Marine ecosystem, soil, water resources, agriculture and food, grassland, forestry, other ecosystems, disaster response, etc.

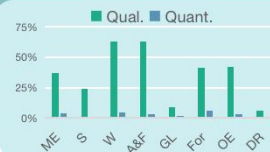


Over **90%** of NDCs proposed mitigation-related NbS

RE has a higher rate of quantitative targets compared to agriculture and forestry

Those propose RE-related contents are mainly developing countries

Though NbS has not yet been concretely defined and its elements are still scattered, its connotation has been widely explored in climate governance



Adaptation-related NbS contents are mainly put forward in the qualitative form

NbS elements are more abundant in the field of adaptation than that of mitigation

Those propose adaptation-related NbS are mainly developing countries, particularly countries vulnerable to climate risks

NbS is closely related to adaptation and draws attention of developing countries. Developed countries rarely include NbS in NDCs.

Case of China: NbS and development of ecological civilization

Compatible concepts

Since "18th National Congress of the Communist Party of China", China has been committed to the development of ecological civilization. Guided by the principle of "lucid waters and lush mountains are invaluable assets", China explores social and economic development model of harmonious coexistence between man and nature, with which the NbS concept is compatible.

"For nature, from nature, with nature"

"Solution-oriented"

Available Practices

Available Practices	Law-making	Comprehensive administrative means	Economic means	Standards & specifications	Major engineering projects	Information transparency
Eco-system restoration	✓	✓	✓	✓	✓	✓
Soil & water preservation	✓	✓	✓	✓	✓	✓
Desertification control	✓	✓	✓	✓	✓	✓
Natural resources management	✓	✓	✓	✓	✓	✓
Carbon-sink resources	✓	✓	✓	✓	✓	✓
Water resources	✓	✓	✓	✓	✓	✓
Ocean	✓	✓	✓	✓	✓	✓
Nature reserve	✓	✓	✓	✓	✓	✓
Biodiversity conservation	✓	✓	✓	✓	✓	✓
Ecological red line	✓	✓	✓	✓	✓	✓
Biodiversity conservation	✓	✓	✓	✓	✓	✓
Green infrastructure	✓	✓	✓	✓	✓	✓

Challenges for mainstreaming NbS

Definitive?
Are NbS limited to policies and actions conducive to maintaining and enhancing ecosystem functions?

Extra value?
What are extra values of NbS compared to existing conservation practices?

Balance?
How can NbS balance protecting nature and meeting needs of mankind?

Cross-sector?
How to overcome the disadvantage of unclear jurisdiction in policy practice?

NbS for governance synergy

Set NbS targets for climate change and biodiversity conservation and consider progress tracking; further include quantitative NbS targets in NDCs

Mainstream NbS in climate change and biodiversity conservation **planning**; the two fields shall incorporate each other in its respective planning to avoid impacts

Mobilize NbS funds to facilitate synergy; consider utilization of climate fund, REDD+, public-private partnership to relieve burden