

Enhancing uptake of blue Nature-based Solutions in European marine and coastal-related policies

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This policy brief identifies policy challenges in implementing marine and coastal Nature-based Solutions (blue NBS) and suggests recommendations and opportunities to enhance their integration into European Union (EU) policies.

Blue NBS are generally overlooked in European policies despite their crucial role in maintaining ecosystem health, biodiversity, resilience, and services essential for human wellbeing. Key challenges to their uptake in marine and coastal-related EU policies include: (1) sectoral fragmentation and weak policy frameworks; (2) under-performing governance arrangements; (3) insufficient funding; and (4) lack of a comprehensive approach to NBS in EU policies. These challenges are interrelated, and solutions can benefit multiple areas. This policy brief offers recommendations for each step of the policy cycle to help overcome these challenges and highlights specific EU opportunities to integrate blue NBS in climate change, biodiversity conservation/restoration, and marine policies. Overall, it stresses the importance of mainstreaming blue NBS into the EU policy-making process.

Introduction

Nature-based Solutions (NBS) offer promising avenues for addressing various environmental, societal, and economic challenges facing Europe in the 21st century. The European Commission (EC) defines NBS as ‘solutions that are inspired and supported by nature, which are cost-effective, simultaneously provide environmental, social, and economic benefits and help build resilience [...] Nature-based solutions must therefore benefit biodiversity and support the delivery of a range of ecosystem services’¹. NBS are important management approaches for simultaneously tackling biodiversity loss and climate change while also supporting sustainable development^{2,3}.

Blue NBS encompass protection, restorative activities, and other sustainable management measures⁴. Marine and coastal governance for the implementation of blue NBS have seldom been studied⁵. Indeed, most policies incorporating NBS currently deal with urban areas

or forests, especially at local – and not regional or EU – levels. Despite growing recognition of the benefits of blue NBS, their uptake across Europe remains uneven. After having established promising research programs on NBS, policymakers are now struggling to move from conceptualisation to policy adoption and implementation of NBS⁵. The adoption of NBS is critical for achieving multiple policy objectives outlined in the international and EU's strategic frameworks, including the Sustainable Development Goals, the European Green Deal, and the Biodiversity Strategy for 2030.

Challenges, policy recommendations and policy opportunities to improve the uptake of blue NBS at the EU level are identified in this policy brief.

Main challenges for the uptake of blue NBS in EU policies

1. Sectoral fragmentation and weak policy frameworks for blue NBS

Fragmented policy frameworks on marine conservation, fisheries management, coastal development, and climate adaptation make it hard to integrate blue NBS into existing policies⁶. Specifically, the sectoral fragmentation of policies is problematic in tackling interdependent challenges such as climate change mitigation and adaptation, biodiversity restoration and sustainable development. Blue NBS must be implemented through a cross-sectoral approach to deliver desired objectives. However, although the importance of NBS is referred to in EU strategies and communications, NBS remain to be included as formal requirements in any EU policy (e.g., directive or regulation). A more stringent, consistent, and comprehensive approach to NBS in EU policies is necessary⁵.

2. Under-performing governance arrangements

Existing governance arrangements are not adapted to implement policy interventions that cover multiple sectors, integrate landscapes and seascapes, and take cross-jurisdictional approaches involving multi-level engagement¹, yet this is what blue NBS require. Practically, the division of political initiatives between DG MARE, ENV, and CLIMA presents an obstacle to the adoption of NBS in EU policies. Additionally, although many scientific networks exist to feed NBS research outputs into the policy cycle, insufficient consideration is given to developing NBS in EU policies through arrangements that include diverse actors such as scientists, stakeholders, and policymakers.

3. Insufficient funding

Research funding programmes (e.g., Horizon 2020) support NBS research and innovation. However, less than 5% of climate-related finance is dedicated to climate impact mitigation, and less than 1% is allocated for coastal protection, including NBS³. There is a structural lack of funding to support the planning, implementation, and monitoring of blue NBS⁵, although this financial flow is an enabling condition for NBS⁴. Moreover, sustainable NBS can only be achieved through long-term financing and investments⁷.

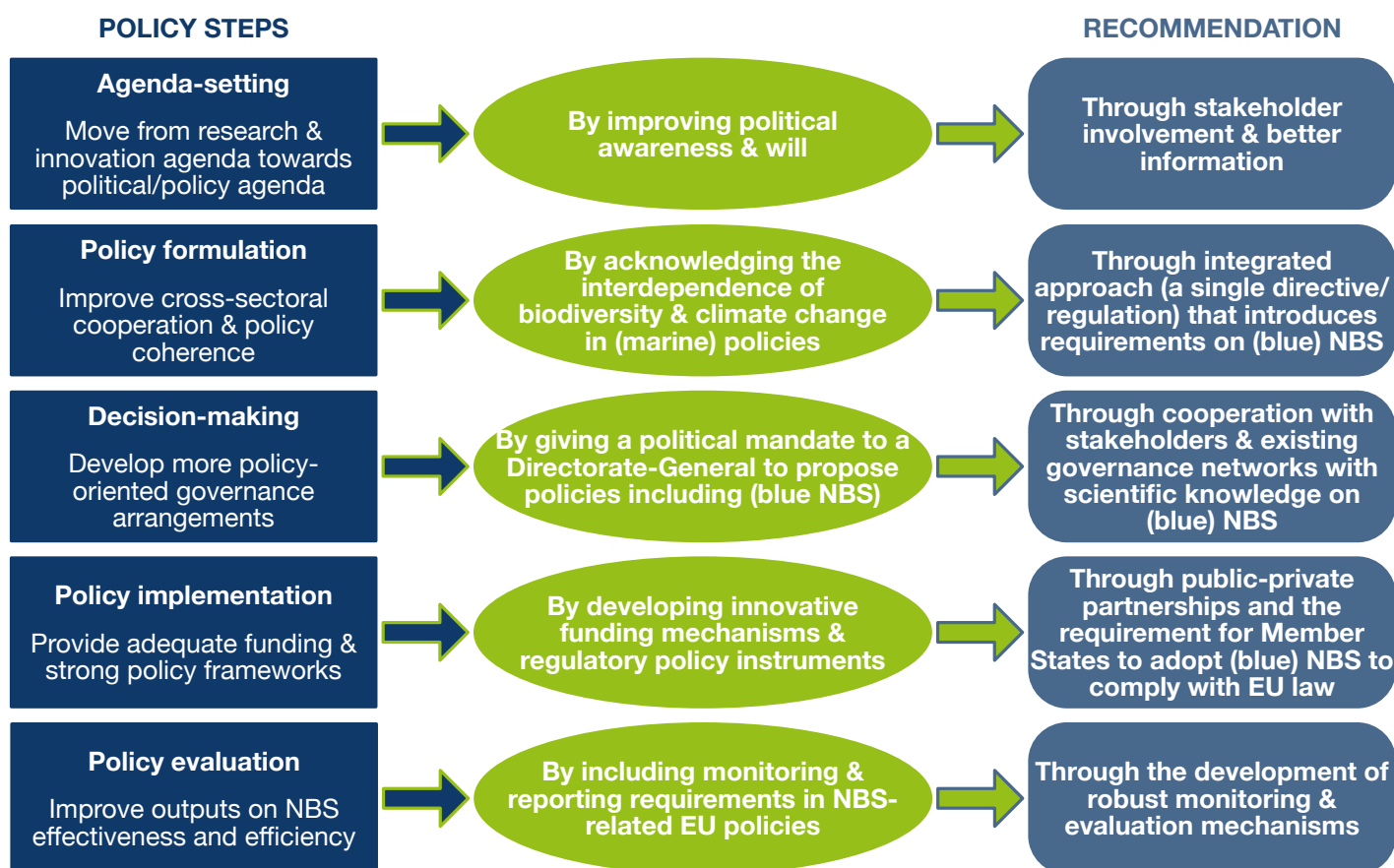
4. Lack of comprehensive approaches within EU policies

Blue NBS are facing challenges at all steps of the policy cycle: they are not prioritised in policy agendas, which then results in limited and insufficient funding and investments⁸. Then, the objectives to be achieved and the actions to complete the policy goals are sometimes incoherent⁸. Furthermore, adopted regulations are not adequate to support NBS implementation because of regulatory gaps or inconsistencies that may hinder their uptake or effectiveness⁷. Finally, there is no framework to assess NBS impacts on several challenges and at different geographic scales³.

Policy recommendations

The policy recommendations formulated below are designed to improve the uptake of blue NBS in EU policies. They are presented following the policy cycle steps.

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EU policy opportunities

Several EU policies could serve to improve the uptake of blue NBS and are identified here.

1. Policy opportunities for coordination, coherence, and integration of blue NBS and strengthened policy frameworks

- Extend coordination between policies developed under the umbrella of the **European Green Deal**.
- Implementation of the **Biodiversity Strategy for 2030 and the next EU Biodiversity Strategy**: (1) monitoring of NBS adoption and implementation; (2) evaluation of NBS; (3) adoption of formal requirements for NBS in the next Biodiversity Strategy.
- Draw lessons from urban planning policies where NBS have been implemented and assessed.

- Revision of the **Marine Strategy Framework Directive**.
- Implementation of the **regulation on Nature Restoration**.

2. Policy opportunities for the funding of blue NBS

- European Maritime Fisheries and Aquaculture Fund (EMFAF) – BlueInvest.
- Blue Economy Strategy.
- Sustainable blue economy Communication – sustainability criteria.
- Bioeconomy Strategy.
- EU Taxonomy for sustainable activities.
- Proposal for a regulation introducing new environmental economic accounts models (COM/2022/329) – Natural Capital Accounting.



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Mainstreaming blue NBS into the EU policy-making process

The challenges identified in this policy brief point out a need for mainstreaming blue NBS into decision-making processes and in policy frameworks, which then translate into adequate regulations.

Although NBS have been mentioned in EU strategies and communications for years, they have not yet managed to make it to the EU political agenda and formal policies. For that reason, NBS should be automatically considered during policy design and formulation linked to marine and coastal environments.

At the European level, this should happen during the impact assessment analyses, when different policy interventions are developed and compared. Indeed, impact assessment has already been found to be a key step for the mainstreaming of NBS in urban areas⁹ and to support policy-making as well as effective NBS implementation¹⁰.

An additional measure to reinforce NBS implementation could be taken by extending the scope of the Environmental Impact Assessment directive, which outlines major building and development projects for which an EIA is required.

To support impact assessment analyses, evaluations should be required and facilitated through support in the monitoring and development of indicators to measure the effectiveness and efficiency of blue NBS in marine and coastal ecosystems.

The integration of blue NBS in marine and coastal governance and policies through evaluation and impact assessment would allow for a multi-dimensional analysis of their costs and benefits, which is regularly asked by many public and private stakeholders³.

References ¹ Wild et al. (2020). *Nature-based solutions: State of the art in EU-funded projects*. ISBN 9789276173342. | ² O'Leary et al. (2023) <https://doi.org/10.1016/j.nbsj.2022.100044> | ³ Seddon et al. (2020) <https://doi.org/10.1098/rstb.2019.0120> | ⁴ Ferraro & Failler (2021) <https://doi.org/10.1080/25741292.2021.1885797> | ⁵ Riisager-Simonsen et al. (2022) <https://doi.org/10.1016/j.marpol.2022.105198> | ⁶ Faivre et al. (2017) <https://doi.org/10.1016/j.envres.2017.08.032> | ⁷ Nesshöver et al. (2017) <https://doi.org/10.1016/j.scitotenv.2016.11.106> | ⁸ Ferreira et al. (2022) <https://doi.org/10.1016/j.envsci.2022.02.007> | ⁹ Van der Jagt et al. (2023) <https://doi.org/10.1007/s13280-022-01772-6> | ¹⁰ Anderson et al. (2022) <https://doi.org/10.3390/buildings12010061>

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