

Marine Biodiversity Net Gain (BNG)

What are the key drivers behind BNG?

The head of the World Wildlife Fund (WWF) has called for the world to adopt a goal of being “nature positive” by 2030.

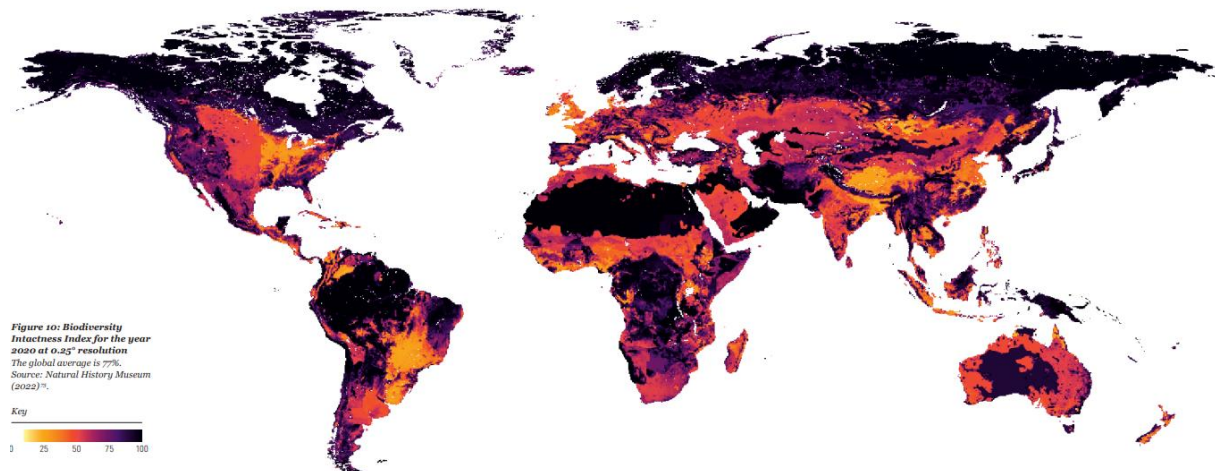


Figure 1 – Biodiversity intactness index¹

The Biodiversity Intactness Figure has concluded that significant parts of the world have lost so much biodiversity that the resilience and functionality of their ecosystems risks collapse. According to PwC, the global economy depends on biodiversity. More than half of the world’s GDP, equivalent to \$58trn, is dependent on nature².

What is the relationship between business and biodiversity?

Businesses rely on natural materials to assist with production processes, but are also heavily reliant on ecosystem resources to complement business models. A business can be impacted by soil quality, water scarcity and air quality. It is crucial for organisations to understand their direct (operational) and indirect (value chain) relationship with biodiversity.

What does biodiversity net gain mean?

This involves reversing nature loss to a greater extent than an organisation has driven nature loss. This ensures a measurably positive impact compared to what was there before a development. Marine biodiversity net gain takes BNG as a concept and applies it to projects at sea. Given the challenges of construction in the marine environment, it means a slightly different approach to BNG, with more offsetting or compensation falling outside the boundaries of developments.

¹ [How intact is nature?](#)

² [WEF New Nature Economy Report 2020 \(weforum.org\)](#)

Meet biodiversity net gain requirements: Steps for developers

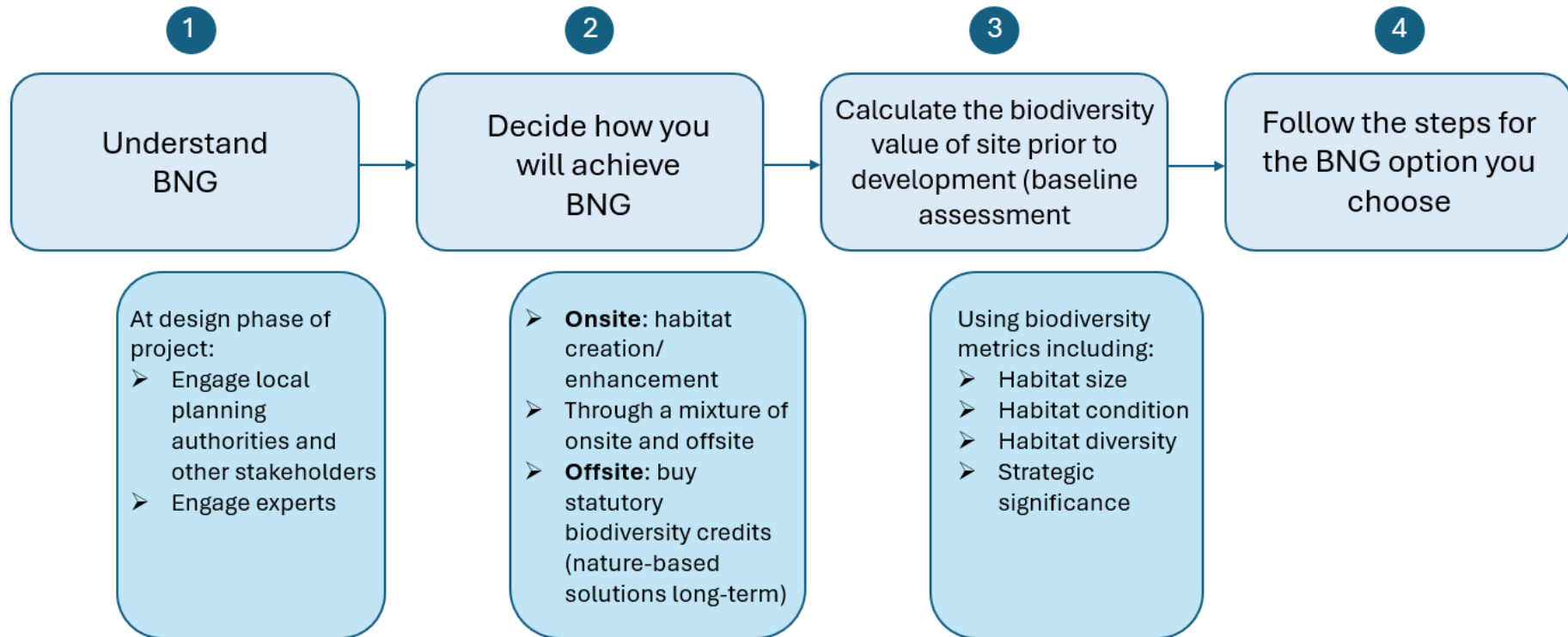


Figure 2 – Steps to meet biodiversity net gain requirements

Who are the stakeholders?

BNG is relevant to stakeholders including developers, government organisations, consultancies, and the wider industry. Particularly in the Offshore Renewables industry, many developers have launched their own BNG policies, including Orsted, RWE, Vattenfall and SSE Renewables³.

Legislative process

BNG has become mandatory from February 2024 for most terrestrial (including intertidal) projects seeking planning permission under The Town & Countryside Planning Act (1990) in England, requiring a detailed, standardised measurement of habitats present on site before and after development. Moreover, developers must evidence how they apply the 'mitigation hierarchy' and then how residual loss of habitats will not only be reinstated, but further enhanced by at least 10% above the baseline and secured for a minimum of 30 years.

The UK government is assessing how Marine Net Gain principles could work in England. The summary of their 2022 consultation⁴ can be found here: [Consultation on the principles of Marine Net Gain – Summary of responses](#). Other European countries – e.g. The Netherlands – are already requiring implementation of BNG measures during the tendering phase of certain offshore site developments in the Dutch North Sea.

What are the opportunities of BNG?

- ◆ Economy
 - Contributes to sustainable development and increasing natural capital through a positive impact on biodiversity.
- ◆ Long-term investment in nature
 - Can act as a green finance mechanism and source of income.
- ◆ Climate Change
 - Contributes adaptation measures and net zero through nature-based solutions.
- ◆ People and Places
 - Improves health and wellbeing by creating or enhancing natural spaces.

What are the challenges

- ◆ Cost
 - The project budget should be sufficient to cover the entire process, including deal, delivery, reporting, and monitoring and management site visits. Accurate, accessible ecological survey data is critical at every stage of the project. Interactive GIS maps have to be developed to meet biodiversity metrics
- ◆ Lack of guidance
 - Biodiversity is a somewhat nuanced concept which has, historically, not received as much attention as climate and carbon emissions. There is a lot of uncertainty round the practicalities of BNG, and this is reducing the confidence people have in the system. There is currently no regulation or government centralisation for the market of biodiversity units.

³ [Unlocking nature's potential: how renewable energy can restore biodiversity | Fugro](#)

⁴ [Consultation on the Principles of Marine Net Gain](#)

Additionally, most of the habitat creation ideas such as nature-based solutions are still in the pilot phases.

What steps can be taken by the offshore marine contracting industry to achieve biodiversity-positive outcomes on projects?

The Cross-sector Biodiversity Initiative⁵ has designed a tool and a framework for managing risks and potential impacts related to biodiversity and ecosystem services. It includes marine and terrestrial case studies and key considerations during a project lifecycle with the main principles below:

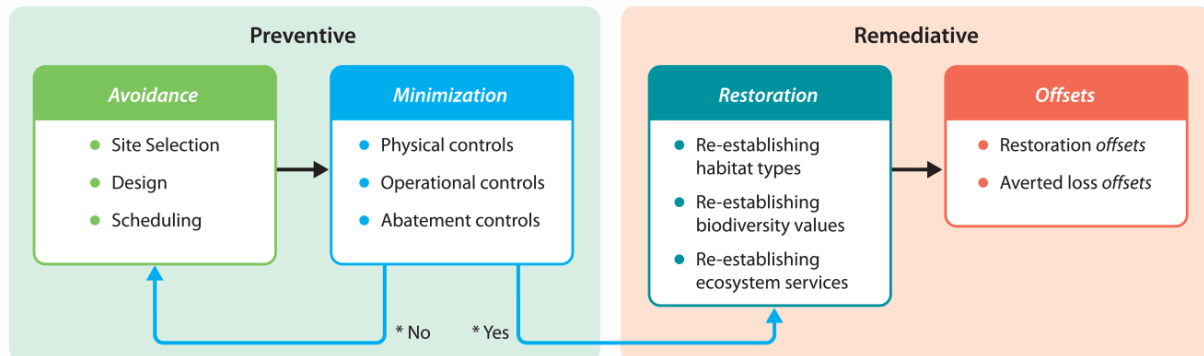


Figure 3 – Schematic showing the implementation of the mitigation hierarchy⁵

Related guidance

- ◆ Biodiversity net gain – GOV.UK (www.gov.uk)
- ◆ Biodiversity Net Gain Brochure (blog.gov.uk)
- ◆ Biodiversity Net Gain: Good Practice Principles for Development | CIEEM
- ◆ Biodiversity_gain_plan.docx (live.com)
- ◆ Mitigation Hierarchy Guide – CSBI
- ◆ Nature-based Solutions for Offshore Wind: A Proactive Approach to Sustainability – Tetra Tech
- ◆ Marine Net Gain A Proof-of-Concept Assessment of Experimental Metric Calculations and Approaches Utilising Walney Extension Wind Farm as a Case Study (livingseasnw.org.uk)
- ◆ Unlocking nature's potential: How renewable energy can restore biodiversity | Fugro

For further support on the topic of net gain, please contact sustainability@imca-int.com.

⁵ Mitigation Hierarchy Guide – CSBI