



Helping Offshore Developers Plan for Nature-Inclusive Design

By Sarah Cosgrove, PhD, Restore Innovation, CEO

Marine ecosystems make up 99 per cent of the planet's living space by volume, yet they are among the least visible and most fragile environments. Unlike terrestrial habitats, their health is often difficult to observe, making them more prone to being misunderstood or overlooked. As offshore wind energy accelerates across Ireland and Europe, it is vital that biodiversity protection and ecosystem health are considered from the outset. Nature-Inclusive Design (NID) presents a key opportunity to embed nature-positive solutions into renewable energy development.

Restore's Nature-Positive Vision

Restore Innovation was established to support offshore developers plan for the sustainable use of ocean space for renewable energy by identifying NID opportunities that support ecosystem restoration and biodiversity enhancement, building with nature in mind. Rather than focusing solely on mitigating negative impacts, Restore promotes a shift toward proactive, net-positive approaches where offshore wind development becomes part of the solution for marine conservation.

Opportunities Within the Red Line Boundary

Within the full boundary of an offshore wind project - from the intertidal zone to offshore turbine locations - there is significant potential to incorporate NID measures. These can range from simple to complex, and choosing the right approach to successfully co-exist with marine protected areas and nearby fishing grounds presents a unique set of challenges. Such solutions include those which offer shelter and foraging opportunities for juvenile fish, create artificial reefs for the targeted colonisation of key species, in addition to innovative monitoring technologies to assess biodiversity and support adaptive site management. When combined with reduced fishing pressure, these solutions can help transform wind farms into thriving marine reserves.

Data-Driven Support for Developers

To help developers realise the potential of NID, Restore has created a planning platform that supports early-stage decision-making. By leveraging a range of marine data sources alongside our proprietary NID database, Restore offers site-specific insights and tailored guidance on biodiversity strategies. Key features of the platform include:

- Modelled scenarios linking NID solutions to site conditions and local species.
- Global tracking of NID research projects to inform solution selection.
- Prioritisation of strategies that align with ecological and regulatory goals.
- Targeted outputs to aid stakeholder engagement and consultation.
- Real-time access to environmental data to support adaptive project planning.

Meeting Regulatory and Sustainability Goals

Restore's platform enables developers to align with emerging environmental regulations, including the Corporate Sustainability Reporting Directive (CSRD). Through transparent, traceable methodologies, the tool provides a clear framework for identifying biodiversity opportunities and demonstrating compliance across the project lifecycle.

Unlike traditional consultancy models that often produce static reports, Restore's interactive platform keeps developers connected to the latest NID technologies and validated insights and regulatory updates. Continuous access to global insights helps developers respond effectively and unlock long-term environmental and project value.

Looking ahead to bluer waters

By automating key compliance tasks and reducing the need for time-intensive research, Restore helps developers minimise the time, cost, and risk involved in site-specific Nature-Inclusive Design (NID) planning. And, as the sector continues to grow, Restore is committed to evolving alongside it - leading efforts to integrate biodiversity enhancement into standard development practice. Through its innovative, data-driven platform, Restore provides ongoing support to help developers navigate complex NID requirements and embed biodiversity protection, restoration and enhancement as part of site development.