



EU MISSIONS

RESTORE OUR OCEAN AND WATERS



BACKGROUND

ELIA, Belgium's electricity transmission system operator, is leading the development of the [world's first artificial energy island](#) in the North Sea. This project, scheduled for completion by August 2026, will connect offshore wind farms to the mainland, improving energy interconnections across North Sea countries.

From the outset, ELIA has committed to minimising environmental impact and actively enhancing marine biodiversity. To achieve this, the company has engaged a consortium of 15 public and private institutions, universities, and NGOs to co-develop a nature-inclusive design that fosters marine habitats around the island.



MOTIVATION

ELIA views the energy island as a strategic step toward renewable energy expansion and ecosystem restoration. As a transmission system operator, ELIA is motivated by balancing energy security with environmental sustainability. Beyond legal compliance, ELIA considers integrating biodiversity-positive measures a non-negotiable aspect of its business model, ensuring public acceptance and long-term project viability. The initiative also strives to demonstrate how large-scale infrastructure can incorporate nature-based solutions.



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COLLABORATIVE APPROACH

Given the projects' technical and ecological complexities, ELIA has engaged a diverse set of stakeholders, including research institutions, government bodies, and NGOs, to co-create its biodiversity strategy. To ensure effective collaboration, the company employed a neutral, independent process coordinator, who facilitated a structured two-year consultation process with six expert workshops. These sessions enabled joint decision-making on nature-inclusive design features, such as oyster and gravel beds, which align with public restoration goals.

OUTCOMES

The co-creation process has resulted in a comprehensive, multi-layered biodiversity enhancement strategy spanning above-water, water column, and seabed habitats. This integrated approach is expected to significantly improve local marine biodiversity, with ongoing scientific monitoring ensuring adaptive management. Despite some hurdles, the initiative has gained traction beyond Belgium, with European offshore wind developers, universities, and policymakers monitoring the project as a model for future energy infrastructure.



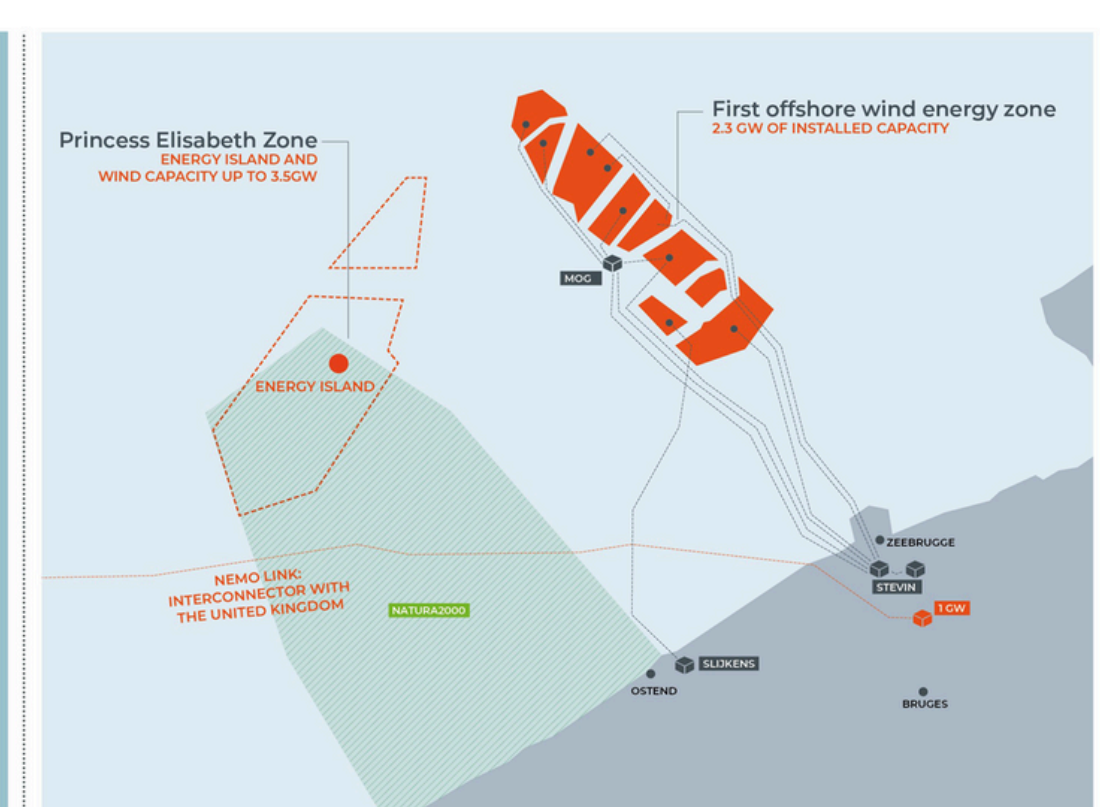
KEY FACTS

45 km

The island will be located approximately 45 km off the coast of Belgium.

3.5 GW

The Princess Elisabeth Island allows the connection of up to 3.5 GW of new offshore wind capacity.



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