

Low-cost survey technique based on environmental DNA (eDNA) analysis

Natural Power is pioneering the use of environmental DNA (eDNA) to transform offshore wind surveying. By enabling faster, lower-cost and more precise environmental data collection, this approach is improving consenting processes while reducing impact on marine habitats.

Before

Natural Power had a strong track record in offshore wind, supporting projects from site selection through to decommissioning. Looking to improve environmental surveying, they identified eDNA as a potential alternative to traditional trawling methods, which are costly, time-consuming and intrusive. To validate this approach, they sought partners and secured OWGP funding to trial the technology.

During

With OWGP support covering 50% of project costs, Natural Power collaborated with NatureMetrics and EDF Renewables to trial eDNA sampling at the Blyth Offshore Wind farm. Over 12 months, multiple surveys compared eDNA data against traditional trawling methods, demonstrating the potential for faster, more efficient biodiversity monitoring. Additional support expanded the scope to explore wider applications across marine ecosystems.

After

The project successfully demonstrated that eDNA can deliver more detailed and accurate biodiversity data than traditional methods, while reducing cost and environmental impact. The findings have been shared with the industry and are now progressing towards regulatory approval, positioning eDNA as a future standard for offshore wind environmental surveys.

How does this help deliver the IGP?

- Reduces consenting costs through faster, lower-cost survey methods
- Minimises environmental impact with non-intrusive data collection
- Improves data quality for environmental assessments and compliance
- Strengthens UK leadership in environmental innovation for offshore wind

eDNA sampling is redefining environmental surveys, delivering better data, at lower cost, with minimal impact on marine ecosystems.



50% project funding secured



New survey standard in development



Smart environmental services

“OWGP-backed eDNA surveys offer a faster, smarter path to offshore wind consenting.”

Michelle Elliot
Principal Environmental Consultant | Natural Power
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