



A leader in intelligent management and energy storage to decarbonise offshore wind O&M

Verlume successfully secured grant funding from OWGP's 2020 Cross Sector Support Call and were paired with delivery partner Xodus, a leading offshore energy consultancy providing technical, engineering and commercial support. Verlume and Xodus worked together for nine months to investigate how Verlume's technology could be applied to the Offshore Wind market.

Impact of the support

In a position to approach industry with a clear solution.

Now engaged with a number of operators to assess opportunities for their technology in Offshore Wind farms.

Built credibility and relationships with key contacts in the sector.

A closer look at Verlume

Verlume's Halo technology is a scalable, modular battery energy storage system with integrated intelligent energy management, specifically developed for clean power delivery in the demanding underwater environment.

The funding enabled Verlume to develop the technical specification for an Intelligent Wind Energy Storage (IWES) platform. This will be a battery energy storage solution, packaged for the harsh offshore environment, subsea or within the tower or substation, a much needed solution to transition offshore wind farms away from diesel generators.



BUSINESS PROFILE

- The company's core technology had recently become commercialised.
- Active in the marine renewables and oil and gas sector, looking to expand into Offshore Wind.
- Saw an opportunity to improve energy storage in marine renewables.

SUPPORT RECEIVED



Solutions for the offshore wind industry



Intelligent energy management and energy storage technologies for the energy industry.

Underwater, offshore and onshore solutions to decarbonise operations.

Energy management and battery storage system chosen by RWE for 760MW OranjeWind project.



CASE STUDY

How did OWGP's support propel Verlume's business into the Offshore Wind sector?

Before

Prior to OWGP's support Verlume, formerly EC-OG, was exploring the wider offshore renewables sector, specifically looking at ways in which its technology could bring efficiencies and mass decarbonisation in the sector.

Verlume was confident that there was a significant opportunity for its business in the Offshore Wind space for its already commercialised energy storage systems but sought deeper market insight and funding to further identify a use case.

During

Over nine months, Verlume and Xodus worked together to better understand how Verlume's Halo technology – a scalable, modular battery energy storage system with integrated intelligent energy management, specifically developed for clean power delivery in the demanding underwater environment – could be used in the Offshore Wind market.

With Xodus's market and engineering expertise, the company focussed on how Verlume's technology could be applied, what the business case was and the fundamentals required to enable Verlume to confidently approach potential customers in the Offshore Wind sector.

The project culminated in a report which found that the Verlume energy storage system could be utilised as an alternative for diesel backup generators for Offshore Wind sites. Systems would be able to charge up when there is an excess of wind and then discharge when there is no wind. The report highlighted that the work being carried out was needed for the sector, and commercially highlighted areas of the system that needed to be optimised.

After

The OWGP supported project put Verlume in a position where they could approach potential customers with a strong concept and business case with a solution to decarbonise their Offshore Wind operations.

In 2023, this engagement resulted in a major contract win with RWE. Verlume is now working with RWE to integrate battery storage and energy management systems into the developer's 760MW wind farm OranjeWind in the Dutch North Sea.

Verlume continue to engage with a number of Offshore Wind operators, looking at how they can use its products in future offshore wind farms.



With Offshore Wind being an important target growth market for our business, the Offshore Wind Growth Partnership's programme has been fundamental for building our credibility in this area and has helped to facilitate relationships with key contacts at wind operators. ”



RICHARD KNOX

Managing Director,
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www.verlume.world