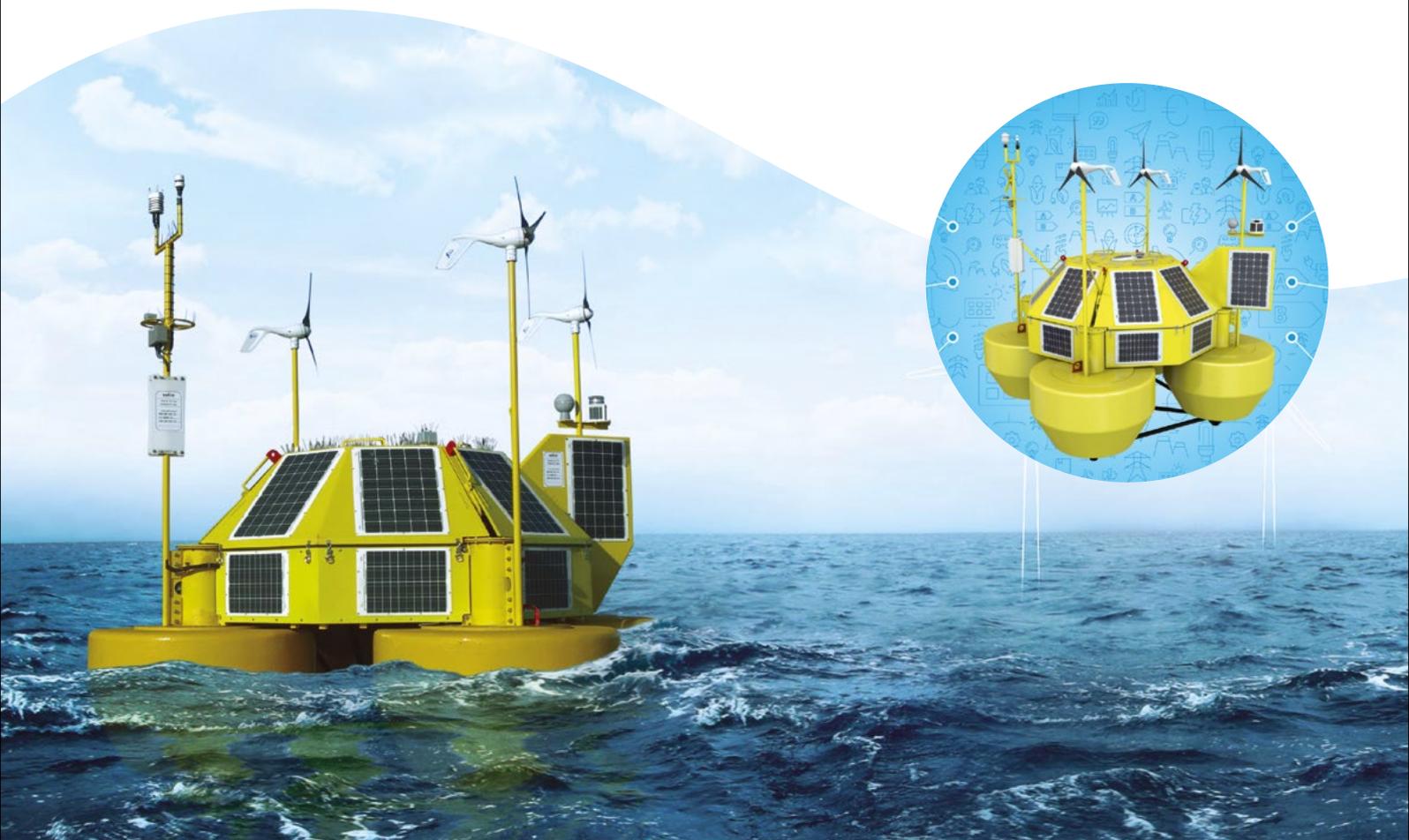


Floating LiDAR Solutions

# Reducing the costs and risks of offshore wind development

**Accurate, cost-effective, and versatile floating wind measurement system**



Early assessment of energy yield

Accurate and reliable data

Cost-effective and versatile

Easy transport and operations

Robust structure for harsh environments

Energy autonomy and reliability



## The challenge

# The financial risks of offshore wind development

Analysing potential performance and energy yield is an essential factor in the development of offshore wind generation. Reliable and accurate wind measurement helps reduce financial risks and enhances the bankability of a project for investors, utilities, and turbine manufacturers.

Traditional methods for wind assessments rely on the installation of fixed-bed meteorological masts, which requires significant upfront financing. The EOLOS FLS200 overcomes both the high costs and the limited application of the fixed-mast method, to demonstrate the viability of a much wider and more diverse range of planned projects.

## The solution

# reducing the cost of offshore wind measurements

The EOLOS FLS200 is a highly robust floating buoy that uses LiDAR (light detection and ranging) technology to gather high-quality wind and ocean data from any offshore location.

It enables wind farm planners to perform wind measurements at heights of more than 200 metres above sea level, and to calculate wave and current movements up to depths of 300 metres. As a floating buoy, the EOLOS FLS200 allows for fast installation and rapid re-location to other areas within a wind farm site or to completely new sites when required.

By using the EOLOS FLS200 floating LiDAR system, project developers can reduce the costs of essential wind measurement by a factor of ten compared to conventional mast installations.

## Key features

The EOLOS FLS200 is a fully-equipped, autonomous system for measuring wind, wave and current that features:

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State-of-the-art data capture for consistently high levels of data quality, accuracy and reliability

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An ability to measure at different heights above sea-level for use in a wide variety of circumstances

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An advanced data-processing tool based on a combined model specifically designed for wind, wave and current measurement

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Full energy autonomy to continue delivering measurements from remote locations without refuelling

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A modular design that is easy to mount, disassemble and transport to new locations

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A sturdy structure that is optimised for the rigours of offshore operations

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# eolos

## EOLOS Solutions

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To discuss what EOLOS FLS200 can do for your organisation, contact us at [info@eolossolutions.com](mailto:info@eolossolutions.com)

## The value

# Increasing certainty for offshore wind developers

The EOLOS FLS200 enables wind farm developers, investors and turbine manufacturers to generate an accurate assessment of potential energy yield, based on precise, actionable and comprehensive data at the pre-development phase. By providing a solid evidence base for proposed developments at a much earlier stage in the business cycle, it enables developers and owners to minimise their financial risks and operational costs – and so increase total offshore wind generation capacity.

The EOLOS FLS200 has successfully completed a six-month validation campaign in collaboration with RWE Innogy, supported by the Carbon Trust, the Offshore Wind Accelerator (OWA), and the Dutch R&D programme FLOW. The EOLOS FLS200 has also been subject to third-party validation from the Energy Research Centre of the Netherlands (ECN).

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