Stiesdal®
Offshore

Scaling and de-risking floating wind

Stiesdal Offshore provides engineering services, full-service project support, and execution for floating offshore wind projects, working closely with clients to streamline project delivery.

One-stop shop for floating offshore wind projects
Stiesdal Offshore engages proactively with clients, WTG OEMs, certification bodies, EPCI contractors, and suppliers throughout the project lifecycle, contributing to viable outcomes and reduced project risk. The company offers owner's engineering services across various foundation technologies.

Tailored innovations aimed at reducing cost
Stiesdal Offshore has developed a range of technical solutions to reduce the CAPEX of floating wind projects. These include optimization of mooring systems and foundation designs, as well as cost-efficient solutions for inter-array cables, transport and installation, and operation and maintenance. Specific measures include new anchor types, co-design of dynamic cables with suppliers, application of advanced system-level sizing methods, and the use of larger, more efficient buoyancy tank configurations.

By addressing complexity and reducing cost and risk across the value chain, the company supports the deployment of large-scale floating offshore wind projects. The intended effect is to accelerate the deployment of large-scale commercial floating offshore wind projects.

Solutions for industrial-scale floating wind

Over the past three decades, the success of fixed-bottom offshore wind has been driven not only by innovation but by industrialization.

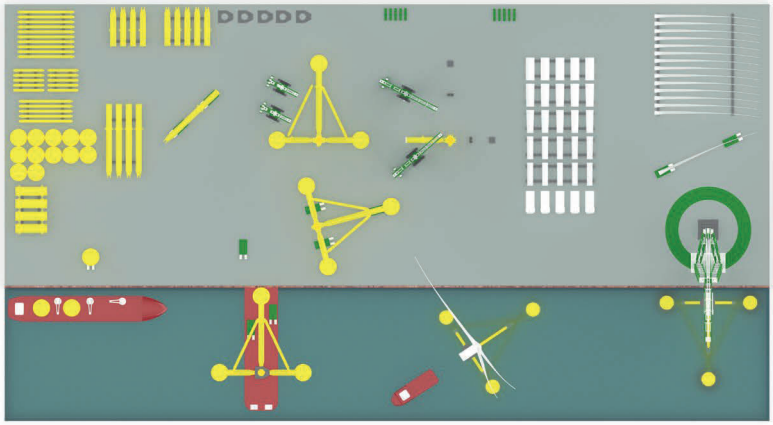
Standardization, modularization, and repeatable supply chains have moved the sector from niche to mainstream. A similar transformation is now required in floating wind.

At Stiesdal Offshore, this approach is applied across all solutions. Cost reduction is pursued through smart, scalable design, with the aim of enabling the delivery of clean, low-cost energy at pace - an important step towards meeting global climate targets.

Technologies and services are developed for volume production, replication, and implementation in real-world projects.

Industrialization is not solely a manufacturing strategy; it is central to enabling floating wind at global scale.

Scan to learn more
Download this flyer and explore videos showcasing the Tetra technology in action.



Solutions for GW-scale projects

Mastering turbine OEM interfaces
Stiesdal Offshore has expertise in managing turbine OEM interfaces with floating foundations, ensuring effective integration between turbine systems, floating structures, and station keeping systems. The company's understanding of both turbine specifications and foundation design supports compatibility, performance, and safety. Close collaboration with OEMs and certification bodies addresses challenges such as load distribution, dynamic behavior, and maintenance accessibility, facilitating the interface between turbine technology and floating wind infrastructure.

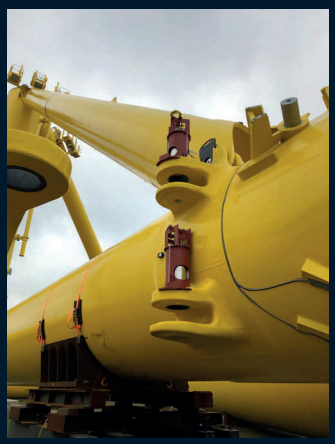
Integrated Load Analysis (ILA)
Integrated Load Analysis (ILA) is essential for the safe and cost-effective operation of floating offshore wind systems. Stiesdal Offshore's capabilities cover all aspects of ILA, including load calculations, fatigue assessments, and simulations of extreme conditions. By accounting for variables such as wind, waves, currents, and turbine-induced forces, the company delivers robust solutions that support reliable system performance under demanding environmental conditions.

Port studies and onshore logistics
Selecting a suitable port for floating wind projects requires assessment of several critical factors. With detailed knowledge of port infrastructure, Stiesdal Offshore evaluates key aspects such as ground bearing capacity, quay length, storage facilities, navigational clearance, and the availability of support services. The company also conducts environmental assessments and manages coordination with other port users. Its comprehensive approach to onshore logistics ensures that port selection aligns with the logistical and operational demands of large-scale floating wind deployment.

The Tetra technology

With the modular, industrially manufactured Tetra foundation concept, Stiesdal Offshore supports the scaling of floating offshore wind.

The Tetra concept is adaptable to any turbine size and water depth. Its design enables lean manufacturing and efficient, industrialized installation processes both onshore and offshore, offering competitive advantages in deployment speed and cost.



The unique Tetra pin solution enabling fast port-side component assembly.

Read more at
www.stiesdal.com

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QUALITY SYSTEM CERTIFICATION DNV ISO 9001

SAFETY SYSTEM CERTIFICATION DNV ISO 45001