

NEREWIND™

Engineering
for renewable
energies





NereWind

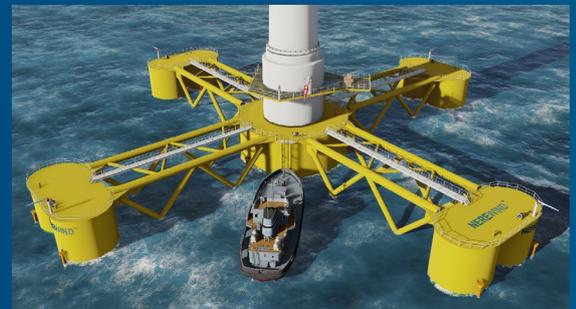
60 years of DORIS expertise in offshore energy engineering brings us the opportunity to contribute to the global energy transition through multiple projects. The production of offshore green energy in one of them.

As the market is seeking for the next generation of cost-effective and reliable floating wind turbines, DORIS renewable energy team worked thought the creation of a floating wind platform design answering the developer/operator needs. Here is the outcome NereWind.

A Complete Design

NereWind is a **competitive, versatile** and **efficient** semi-submersible design with the following common characteristics:

- Multi-columns – 3+1 and 4+1 TRL5 Designs
- Double Trusses
- Attenuation Chambers Below Columns
- Steel, Concrete or Hybrid Alternatives
- Designed for **Largest Turbines** – 10 and 15 MW



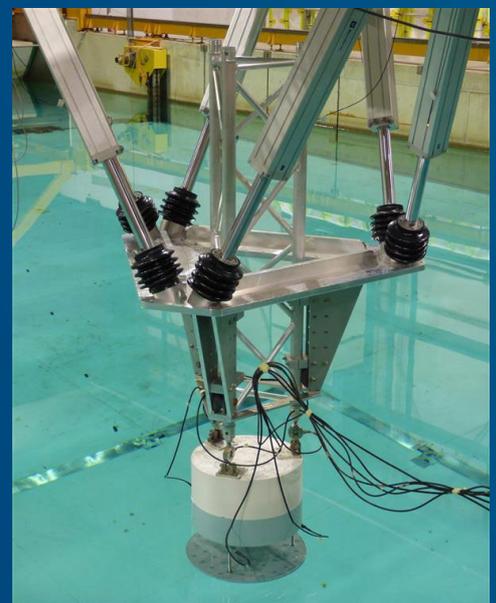
NereWind 4+1 TRL5 design

A Strong Technology Readiness Roadmap

FOWT design tools have been developed and calibrated on early floating studies; today they are supported by robust and valuable IP through extensive DORIS R&D programs, patents, collaborative developments and are completed by industrial partnerships on demand.

A Superior Floater Performance

DORIS' **attenuation chambers** are instrumental to maximize the electrical production from wind turbine with minimum downtime. They improve dramatically the **dynamic behavior** of the floating support in operation while **preserving low draft** for operations at quayside in lifted position. Likewise, floater motions at connections with electrical export cable connections and moorings are smoothen to ease design of connecting pieces **under dynamic loads**.



Basin tests of Attenuation Chambers

Floating Solution



The Fit-For-Purpose Product for Your Floating Wind Projects

- ▶ Tuned to Improve **Adaptability** to Large Turbines and Optimize **Convergence** of Design Loops
- ▶ A **Passive** Support Without Compromising WTG Performance
- ▶ Fully **Dis-connectable** for WTG Heavy Maintenance at Harbour While Keeping Electrical Continuity for Other Units
- ▶ With **Onboard** Monitoring fit for use, the Digital Twin Will be Your Daily Toolbox for **WTG Control & Overall Performance** for 20+years of Production



Environment & Safety at the core of NereWind

- ▶ **Zero Emission** in Operation
- ▶ Adapted to **Full Diver Less Operations**
- ▶ **Easy & Safe Access** For Regular Inspection & Maintenance (CTVs, SOVs)
- ▶ Designed for **Decommissioning and Recycling**

Driven by Industrialisation & Economics

Arrangement - Simplify pre-fabrication, speed-up assembly

Constructability - Modular design to optimize supply chain

WTG integration - Propose low-cost solutions

Moorings - Redundancy while keeping cost as low as practical

Marine Operations - Use local fleet, minimise downtime and durations

*Decrease your CAPEX
to unlock Floating Commercial Farms
With NereWind*



Rely on 60 Years of Expertise in Offshore Solutions Worldwide

Our DORIS Strengths at your Service

- ▶ DORIS DNA Covers all Aspects of Innovative Offshore Designs
- ▶ DORIS Expertise has Been Acquired Through 60 Years of Offshore Projects, Spanning All Solutions, Technologies & Materials, From the Foundations to the Mast & Export
- ▶ DORIS is Instrumental to Support Offshore Wind Developments Since 20 years in Northern Europe then Asia

...to guarantee timely success of your Offshore wind Farm developments through application of highest safety standards.



Extensive Involvement in Offshore Wind Projects

- ▶ Assistance for Project Developments
- ▶ Support in the Preparation of Wind Farm Licence Applications
- ▶ Engineering & Technical Studies
- ▶ Procurement & Contracting Strategy
- ▶ Construction & Installation Methodology
- ▶ Operations & Maintenance

DORIS Group Renewables Track Record

54 Projects since 2000*

17 Countries

25GW



* Projects details on request

