

VERTI-GO

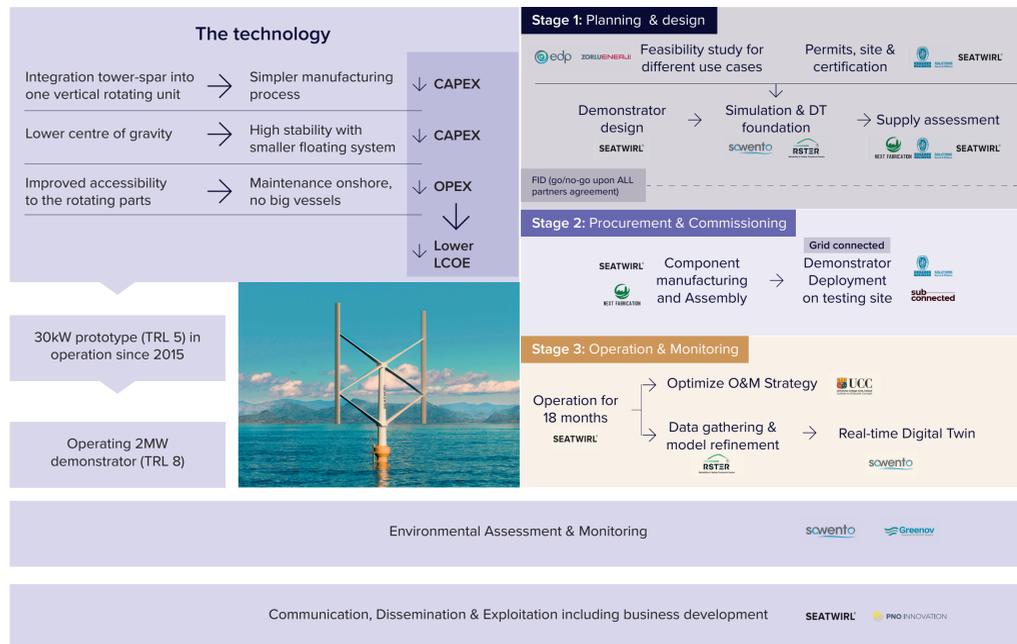
Demonstration of a VERTICAL-axis floating wind turbine for offshore energy Generation with improved performance and accessibility for Operation & maintenance



Concept

VERTI-GO is an innovative floating offshore wind technology featuring a purpose-built vertical-axis wind turbine optimised for deep-water conditions. It tackles key challenges in the floating wind sector by offering:

- **Efficiency & Cost-effectiveness:** Integrated design combines tower and floater into one structure, reducing CAPEX and simplifying operations.
- **Reliability & Simplicity:** Streamlined manufacturing and assembly improve offshore O&M.
- **Scalability:** Building on proven TRL5 performance, the project targets a 2 MW demonstrator in collaboration with industry partners.
- **Impact:** Accelerates next-generation floating wind deployment and supports Europe's clean energy transition.

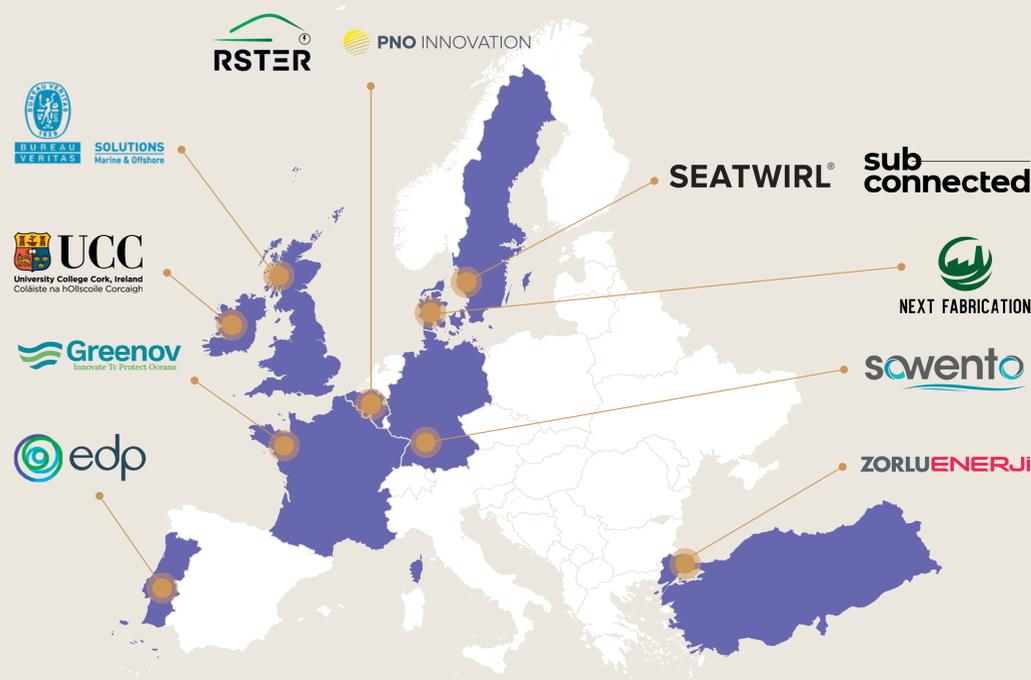


Which challenges will VERTI-GO address?

- **HIGHER UPFRONT COSTS:** Floating wind requires 30–50% more CAPEX than fixed-bottom wind technology, with widely varying LCOE (≈95–160 €/MWh).
- **GRID CONNECTION COMPLEXITY:** Far-offshore locations depend on advanced HVDC systems and major grid upgrades.
- **CAPACITY-CONSTRAINED SUPPLY CHAIN:** Limited manufacturing capacity for platforms, moorings, and specialised vessels create bottlenecks.
- **CHALLENGING OPERATING CONDITIONS:** Harsh offshore environments lead to high O&M demands, which often represent 50–80% of total OPEX.

Key Benefits

- **Lower CAPEX** through integrated design
- **Simplified O&M** with accessible components
- **Scalable innovation:** 2 MW demonstrator building on long-term offshore durability and operation
- **Supports EU clean energy goals**



48 Months | 11 Partners | 09 Countries

21 Mln € Total budget | 15 Mln € EU Funding budget

Contact us

PROJECT COORDINATOR
University College Cork
verti-go@ucc.ie



vertigo-project.eu

Follow us

VERTI-GO Project



Co-funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them. Grant agreement No. 101235735