Acteon

Floating offshore wind track record

We anchor offshore assets with precision.

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We act on our customers' challenges

Acteon delivers safe, efficient and cost-effective mooring solutions for floating assets across offshore energy sectors. From early feasibility through to installation, maintenance and removal, we design and execute tailored anchoring systems backed by deep geophysical and geotechnical insight and specialist vessel-handling expertise. Our lifecycle approach minimises cost, reduces risk and ensures project-critical reliability in even the harshest environments.

80+

Floating wind mooring projects supported globally since 2020

Americas

Year	Work summary
2024	Concrete suction and torpedo pile design
2024	Concept development for quick connect/disconnect of mooring lines and cables
2023	Geotechnical review, anchor sizing and assessment of optimum locations for power cable landfall for a California development
2022	Driven and drilled anchors design, high-level specification of drilling system, installation methodology and cost
2022	Floating offshore wind turbine (FOWT) balance of plant subsea inspection costing study – estimating the lifetime cost of regular subsea inspection of floating foundation, moorings and cables
2022	Mooring engineering study – mooring and anchor design, installation methodology, scheduling and costing for a California lease auction
2022	FOWT mooring feasibility – floating sizing and modelling, and mooring system feasibility for offshore electrification
2022	Wave energy converter, mooring and cable design, support for design, installation and subsea cabling at PacWave
2022	Centipod support for mooring, installation and subsea cabling at a wave converter site
2021	Mooring and anchor concepts for fully restrained platform (mooring and monopile) concept development
2020	Advisor on study of shared moorings for FOWTs

Asia Pacific

Year	Work summary
2025	Generic study of mooring anchor application including several anchor design options
2025	Feasibility study of FOWT mooring installation using an installation barge
2025	Suction and driven anchor design for a floating offshore wind farm (FOWF) in Japan
2025	Desktop study for storage and handling of mooring equipment for FOWF
2024	Mooring study for an offshore wind farm (OWF) in Taiwan
2024	Gravity anchor design, installation and costing for a tension leg platform (TLP)-based floating wind turbine
2024	Engineering studies for the design and installation of an anchor pile including drivability analysis and installation method
2024	Preliminary study for mooring systems of an OWF
2024	Detailed cable installation study including transportation and installation (T&I) and project schedule
2024	Development of TLP T&I operational procedures
2024	Finite element method (FEM) cyclic load analysis for a TLP-based wind turbine
2024	Feasibility study for a TLP-based wind turbine and driven pile design verification
2023	Engineering design scope and T&I study for two upcoming TLP FOWFs (750-1,200 and 150-300 MW capacity)
2023	Cable installation feasibility studies
2023	Inter-array cable installation feasibility study
2023	Mooring line T&I study for three FOWTs
2023	FOWT mooring connector comparison study
2022	Feasibility study of driven pile for a TLP-based wind turbine
2021	Feasibility study of foundation design (drag and suction anchor) for a spar-based wind turbine and procurement cost estimation of mooring and foundation for the whole wind farm
2021	Feasibility study of driven embedded plate anchor and driven pile for a TLP-based wind turbine
2021	Feasibility study of gravity base and hybrid and suction anchor for a TLP-based wind turbine
2021	Feasibility study of driven pile for a spar-based wind turbine and cost assessment for whole mooring system procurement, transportation and installation

Africa

Year	Work summary
2023	Mooring design and deployment procedures for a wave energy project offshore in Nigeria

Europe

Year	Work summary
2025	Multiple study packages for the planning, installation, operations and maintenance of a commercial-scale floating wind farm in the UK: • Mooring system costs and installation comparison study • Mooring repair and sparing philosophy study • Port facilities study – FOWT mooring storage and mobilisation • Anchor feasibility study • FOWT temporary mooring study
2024	Temporary mooring study (wet storage) for Celtic Sea projects
2024	Mooring design for the Eureka floating wind farm in Italy
2024	Mooring design for the Nemetun wind farm offshore in Italy
2024	Pile anchor feasibility study for the Corigliano floating wind farm offshore in Italy
2024	Anchor site feasibility study for a Celtic Sea project
2024	Structural health monitoring system and digital twin for the Kincardine offshore wind farm in Scotland, UK
2024	Geotechnical and anchoring study for a OWF offshore in Italy
2024	Mooring and power cable studies for a OWF offshore in Scotland, UK
2024	Carbon Trust guidance for dynamic cables
2024	Carbon Trust cable wet storage and quick connection
2023	Geophysical and geotechnical campaigns for Bellrock and Broadshore floating wind farms in Scotland, UK
2023	Anchor design for a project offshore in France
2023	Anchor preliminary front-end engineering design (pre-FEED) study for a project offshore in France
2023	Preliminary mooring survey and design; dry electrical connector concept
2023	Detail mooring components, pile anchor, installation engineering and costing for a fully restrained platform monopile with moorings
2023	Preliminary mooring analysis and configurations for a ScotWind project
2023	Hydrodynamic analysis for a project offshore in France
2023	Pre-FEED station-keeping system feasibility study
2023	Feasibility study and mooring equipment storage and mobilisation study for a Celtic Sea project
2023	Design of mooring system for FOWTs offshore in Italy
2023	Mooring system design for a FOWT
2023	Dynamic power cable numerical simulations
2023	Dynamic inter-array cable testing requirements
2022	Structural monitoring campaign for the TetraSpar Demonstrator floating offshore wind farm in Norway
2022	Developing a high-level offshore maintenance strategy for a planned fixed and fixed floating wind development in Ireland
2022	Developing a high-level offshore maintenance strategy for planned fixed and floating wind developments
2022	FOWT drilled anchor study
2022	Investigating failure modes, assessing requirement of spares and repairs, and developing repair strategies for a Celtic Sea floating offshore wind farm project

Year	Work summary
2022	FOWT mooring repair and sparing philosophy – investigating failure modes, assessing spare and repair requirements, and developing repair strategies
2022	Wave energy converter installation study – installation feasibility assessment
2022	Design and specification of mooring, anchor feasibility, supply chain guidance and costing for the current turbine prototype at the European Marine Energy Centre
2022	Mooring and anchor design for two 23 MW FOWTs for AO5 tender in France
2022	Gravity anchor screening and assessment for a 15 MW FOWT for AO5 tender in France
2022	FOWT drilled anchor feasibility – drilled anchor sizing, high-level procedure and costing
2022	Anchor screening, anchor design, shared anchors and costing for AO5 tender in France
2022	Mooring equipment rental for tow and temporary moorings for Hywind Tampen floating offshore wind farm in Norway
2021	Dynamic cable technology qualification
2021	Preliminary design of drilled and grouted anchors for a FOW demonstration project
2021	High-level procurement and installation cost comparison of six FOW concepts
2021	Mooring analysis for an energy harvesting ship
2021	Additional mooring and dynamic cable development for upgrade to 15 MW turbine, three vs six legs, fatigue design and substation mooring design
2021	Feasibility assessment for multiple mooring configurations
2021	Evaluating floating foundation types and fabrication options for the Baltic Sea using a Polish supply chain partner
2021	Support for Stinger Keel mooring design
2021	FEED for a mooring and cable demonstration project, including detailing cable monitoring accessories and installation procedures
2021	Preliminary mooring design and configuration assessment to provide technology readiness assessment as input for project bankability
2021	Provision of additional information from post-processing of three mooring configurations and developing a lazy wave configuration for dynamic cable
2021	Pre-FEED study for anchor systems, tensioner/line length adjuster, mooring and installation costs for a demonstration unit
2020	Mooring feasibility study for a ScotWind area wind farm
2020	Analysis of the options related to the pre-laying of anchors for FOWTs and hook-up of the floaters
2020	Definition of a feasible taut mooring configuration that meets station-keeping and capacity limits for a concept floating foundation
2020	Evaluation of the use of suction embedded plate anchors (SEPLA) for TLPs
2020	Pre-FEED and FEED of a wave energy converter

We act across the project lifecycle

Acteon business lines

Intermoor — Moorings and Anchors

Menck — Marine Foundations

UTEC — Geo-services

Solutions

	Site investigation and characterisation	Offshore construction	Asset integrity management	Life extension and decommissioning
	Geophysical and geotechnical surveys Geospatial surveys	Positioning and construction support Integrated marine foundation installation services Mooring solutions	Offshore inspection Monitoring and digital solutions Mooring inspection, maintenance, repair and replacement	Decommissioning engineering Removal and disposal services Asset life extension
Why Acteon	• Comprehensive data collection • Well-organised data orchestration • Insightful interpretation • Enhanced asset value	• Robust experience in the most challenging environments • Advanced equipment • Intelligent approach	• Extensive data-gathering • Insightful analysis • Highly efficient maintenance, repair and replacement	• Tailored decommissioning and life extension plans early in the project lifecycle • Efficient offshore execution
What we deliver	• Mitigating risks • Optimising design, construction and maintenance	• Ensuring safety • Reducing total cost of installation • Accelerating schedule	• Ensuring compliance • Realising maximum asset lifetime value • Reducing total cost of operations	• Maximising asset value • Limiting decommissioning costs • Minimising environmental risks

2H Underpinned by agile engineering consultancy that enhances project-critical decisions, optimises economic viability and minimises risk throughout the energy project lifecycle.

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