4Subsea has in-depth understanding of complex dynamic analysis of slender and non-slender structures in wind, waves and currents. We develop and refine analytical tools and methods based on extensive accumulated experience, enabling us to provide the best possible services to our clients.

4Subsea offers a wide range of engineering support and digital monitoring services related to floating and bottom-fixed offshore wind systems. We cover all life cycle phases, starting with technology development and conceptual design through FEED and detailed design, procurement, construction, installation, operation, and decommissioning.

**KEY DELIVERABLES**

- Concept development of Floating Offshore Wind Turbines (FOWT)
- Advanced coupled analysis
- Configuration design and fatigue analysis of inter-array and export cables
- Analysis of cable protection systems (CPS) for submarine cables
- Advanced FE analysis of cables/structures
- Root cause investigations of cable irregularities
- Installation analysis and follow-up of offshore installation campaigns
- Subsea routing, on-bottom stability and protection for submarine cables
- Development of test procedures and follow-up mechanical testing of cables
- Monitoring cable motion and freespan
- Digital monitoring on 4insight.io™
- Mooring system design for FOWT
4Subsea is a leading provider of technology and services that help operators optimise energy production from subsea oil & gas fields and offshore wind farms. We combine domain expertise with data analytics and digital services to maximise lifetime of assets, reduce operational cost and optimise future projects through data-driven design.

The company was established in 2007 and clients include the major energy operators as well as the large suppliers of subsea equipment. 4Subsea is headquartered in Asker, Norway with additional offices in Bergen, Kristiansand, Stavanger, Rio de Janeiro, and Aberdeen. 4Subsea is a company in the Subsea 7 Group. More info at www.4subsea.com.

4Subsea - Share ideas, move forward