



Floating Wind Solutions 2022

Driving Full-Scale Commercialization Globally

Conference Program

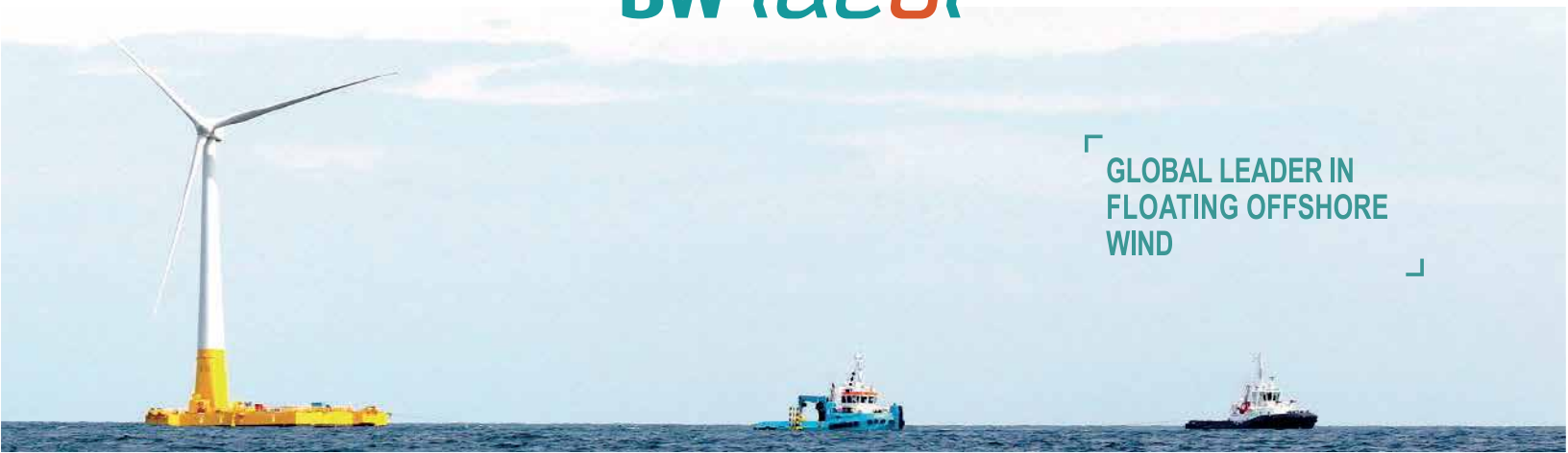
Floating Wind Solutions, Conference & Exhibition
The Marriott Marquis, Houston
1-3 March, 2022

Organized by



BW *ideol*

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FLOATING OFFSHORE
WIND





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Contents

About Floating Wind Solutions	3
Advisory Board	4
Agenda	7
Technical Program - Day 1	8
Technical Program - Day 2	9
Technical Program - Day 2	11
Participants List	14
Exhibition Floorplan & Exhibitors	15



Floating Wind Solutions

The mission of the Floating Wind Solutions Conference & Exhibition is to showcase the many capabilities of the established Global Offshore Supply Chain and create a platform for bridging Supply and Demand while facilitating development of this industry. Floating Wind Solutions' mission is to utilize this platform to bring together the many critical players within the Wind and Offshore industries enabling accelerated adoption of Floating Wind Energy globally. This premier event's primary goal is to accelerate the Energy Transition, by focusing on the industrialization and commercialization of Floating Wind Energy. A world class Advisory Board of industry experts supervise the conference content safeguarding the program; FWS along with our Advisory Board and other stakeholders are committed to the principles of this mission. The FWS 2021 Conference program excelled in a strong line-up of subject matter experts from all over the globe showcasing proven know-how, experience and technology, readily available to the industry. The first edition of FWS proved a resounding success with its stakeholders and was the by far most discussed event on social media



A second generation of Floater Designs is entering the demo stage in readiness for deployment in the second half of the decade. Photo courtesy of Saitec.

Q F W E Quest Floating Wind Energy

In 2018, Quest launched the SaaS business Q FWE – Quest Floating Wind Energy, LLC. a company focused on Economics & Finance, Technology and Market Intelligence within the alternative energy landscape of offshore wind, specifically floating wind energy. Based on over a 100-years of combined experience in all relevant aspects and disciplines of the Global Energy Industry, Quest Floating Wind Energy provides strategic advisory and consulting to end-clients within the global Energy and Financial sectors. Q FWE delivers highly focused market intelligence tools, products and services to the entirety of the Renewables Supply Chain across offshore wind encompassing Floating and Bottom-fixed.

The mission is to unite, educate and expand the global offshore floating wind industry leveraging Quest Offshore's resources and vast experience to bring together the various disciplines and services within this burgeoning sector. Over the past 3.5 years, Q FWE has gained hundreds of subscribers and thousands of followers and is recognized as the leading provider of market intelligence in the Floating Wind Energy industry.

Quest Offshore possesses expert knowledge of the entire Energy Value Chain with decades of experience empowering our clients with Clarity, Insight and Vision. Quest is dedicated to providing market expertise, strategy & advisory and technical conferences to our Offshore Energy clients including MCE Deepwater Development, the leading deepwater oil & gas event in Europe, now in its 17th year. In addition Quest owns and organizes the Deepwater Executive Summit and the Global Offshore Brazil Summit. Quest was the managing partner of the premier edition of OTC Brasil and was the creator of numerous other Offshore Energy events, such as Subsea Houston, Marine Construction Houston, DeepGulf and the Offshore Risk Forum.

For more information please contact Andrew Chadderdon

Quest Floating Wind energy, L.L.C.
77 Sugar Creek Center Blvd., Ste 310
Sugar Land, TX 77479
USA
+1 (281) 725-7664
andrew.chadderdon@questfwe.com





Lars Samuelsson
Manager, Offshore Accounts



Tom Fulton
Head of Renewables, Mooring Development



Jonah Margulis
Senior Vice President US Operations



William Cooper
Managing Director



Bruno Geschier
Chief Sales & Marketing Officer



Alla Weinstein
Founder & CEO



Hans-Petter Overevik
Chief Commercial Officer



Jon Halliburton
Managing Director



David Bloom
Representative



Jerica Nolte
Floating Wind Manager



Leif Delp
Head of Floating Offshore Wind Technology



Henrik Baltscheffsky
Director, Business Development



Ignacio Pantojo
Floating Offshore Wind Department Manager



Yvan Leyni
Floating Wind Solutions Director



Dr. Amy Robertson
Principal Engineer



Shadi Awwad
Business Development Manager
Renewables



Jacob Edmonds
Head of Innovation & Digital



Tyler Studds
Head of Offshore Wind
Business Development – West Coast



Marco Wiedijk
Vice President Business Development



Denis Matha
Chief Consultant
Floating Offshore Wind Team Lead



Darius Snieckus
Editor in Chief



Jerome Ribuot
Renewable Energy Director



Kevin Banister
Chief Development Officer, International



James Cotter
General Manager Offshore Wind Americas



Thomas Agnevall
Managing Director



Jean-Marc Letournel
Senior VP Business & Technology Offshore



Nick Prokopuk
Offshore Wind Business Developer



Steve Rampton
Vice President



Chris Barton
Sr. Vice President
Business Development – Capital Projects



Von Thompson
Vice President Gulf of Mexico



The next step in developing commercial scale: the modular-built TetraSpar in full scale demo, offshore Norway (2020).














Tuesday - March 1, 2022

11:00 am - 07:00 pm	Registration (in exhibition area) sponsored by Shell	
02:00 pm - 07:00 pm	Exhibit Hall Open	
03:30 pm - 05:30 pm	Keynote Session: ‘Spotlight on Developers’	
05:30 pm - 07:00 pm	Ice Breaker Reception (in exhibition area) hosted by Aker Offshore Wind	










Wednesday - March 2, 2022

07:00 am - 08:00 am	Breakfast (in exhibition area) hosted by SBM Offshore		
07:00 am - 07:45 pm	Exhibit Hall Open		
08:00 am - 08:15 am	Developer Keynote		
08:15 am - 10:00 am	Supply Chains, Local Content and Port & Harbor Infrastructure		
10:00 am - 10:45 am	Coffee Break (in exhibition area) hosted by Oceaneering		
10:45 am - 12:30 pm	Subsea Power Cable Solutions		
12:30 pm - 01:30 pm	Lunch (in exhibition area) hosted by Doris		
01:30 pm - 03:15 pm	Mooring Systems		
03:15 pm - 04:00 pm	Coffee Break (in exhibition area) hosted by Oceaneering		
04:00 pm - 04:15 pm	Developer Keynote		
04:15 pm - 06:15 pm	Serial Fabrication / Yard Selection / Availability & Suitability / Capacity		
06:15 pm - 07:45 pm	Evening Reception (in exhibition area) hosted by RWE		

Thursday - March 3, 2022

07:00 am - 08:00 am	Breakfast (in exhibition area) hosted by SBM Offshore	
07:00 am - 06:00 pm	Exhibit Hall Open	
08:00 am - 08:15 am	Developer Keynote	
08:15 am - 09:45 am	Assembly and Installation	
09:45 am - 10:30 am	Coffee Break (in exhibition area) hosted by Vryhof Group	
10:30 am - 12:15 pm	Operations & Maintenance (Life of Field)	
12:15 pm - 01:15 pm	Lunch (in exhibition area) hosted by Doris	
01:15 pm - 03:00 pm	Design & Engineering	
03:00 pm - 03:45 pm	Coffee Break (in exhibition area) hosted by Vryhof Group	
03:45 pm - 05:30 pm	Floater Systems Adaption to Hydrogen Production	
05:30 pm - 06:00 pm	Speaker Awards	












11:00 am - 07:00 pm	Registration (in exhibition area) sponsored by Shell	
02:00 pm - 07:00 pm	Exhibit Hall Open	
03:30 pm - 05:30 pm		
Keynote Session: 'Spotlight on Developers'		
Welcome & Introduction By Paul Hillegeist, Quest FWE		
	Keynote : Presentation by Vincent Fromont President of Shell-EOLFI and General Manager Floating Offshore, Shell Global Renewable Solutions	
	Keynote : Presentation by Jonah Margulis Senior Vice President US Operations, Aker Offshore Wind	
	Keynote : Presentation by David Foulon Head of US offshore Wind, TotalEnergies	
	Keynote : Presentation by Carlos Martin CEO, BlueFloat Energy	
	Keynote : Presentation by Jacob Edmonds Head of Innovation and Digital, Orsted	
	Keynote : Presentation by Chris Willow Head of Floating Wind Development, RWE	
	Panel Discussion Moderated by Darius Snieckus Editor in Chief, RECHARGE	
05:30 pm - 07:00 pm		
Ice Breaker Reception (in exhibition area) hosted by Aker Offshore Wind		















The Hywind Tampen concrete TLP substructures nearing completion.
Photo courtesy of Kvaerner.



07:00 am - 08:00 am	Breakfast (in exhibition area) hosted by SBM Offshore	SBM OFFSHORE
07:00 am - 07:45 pm	Exhibit Hall Open	
08:00 am - 08:15 am	Developer Keynote	
	Keynote : TotalEnergies SBE US, Pioneering a Floating Future for America Kevin Banister, CDO Simply Blue Group and President TotalEnergies SBE US	
08:15 am - 10:00 am	Supply Chains, Local Content and Port & Harbor Infrastructure	
	Keynote : The Importance of Proven Quality and Experience over Opportunistic Initiatives Bruno S. Geschier, Chief Sales and Marketing Officer, BW Ideal	
	Technical Challenges & Innovative Solutions for Floating Systems Carrie Cullen Hitt, Executive Director, National Offshore Wind R&D Consortium	
	Floater design details and infrastructure requirements to enable Industrialized serial-fabrication at US West Coast Thomas M. Newcomb, Chief Consultant, Ramboll	
	Port Infrastructure and Floating Wind: Synergies and Challenges Javier Molinero Arriaga, Floating Wind Manager, DNV	
	Maximising the Floating Opportunity for Ports John MacAskill, Group Marketing Director, AqualisBraemar LOC, OWC	
	Panel Discussion Moderated by Walid Oulmane Assembly Hub and Industrialization Manager, SBM Offshore Assembly Hub and Industrialization Manager, SBM Offshore	
10:00 am - 10:45 am	Coffee Break (in exhibition area) hosted by Oceaneering	OCEANEERING
10:45 am - 12:30 pm	Subsea Power Cable Solutions	
	Mooring and Power Cable Solutions for US West Coast Deep Waters Yusuf Arikan, 2H Offshore	
	Integrated Monitoring of Dynamic Cables Mike Ellis, Business Development Manager - Offshore Renewables, Sonardyne	
	Cable Monitoring - Is There Another Way? Paul Cook, Business Development Director – Renewables, Proserv	
	Panel Discussion Moderated by Paul Cook Paul Cook, Business Development Director – Renewables, Proserv	
12:30 pm - 01:30 pm	Lunch (in exhibition area) hosted by Doris	DORIS



01:30 pm - 03:15 pm	Mooring Systems	
	Meeting the Anchoring Challenges for Floating Wind Tom Fulton, Head of Renewables and Mooring Development, Acteon	
	How can an innovative single point mooring system reduce the LCOE of Floating Offshore Wind? A showcase of recent outcomes from the PivotBuoy project Joao Neves, Director of Strategy and Business Development, X1 Wind	
	Anchoring FOWTs in shallow to deep water Roderick Ruinen, Technical Director, Mooreast Asia Pte Ltd.	
	Optimizing mooring performance and manage risk with data technology Richard Campbell, CEO, Applied Fiber	
	Engineering Fit-For-Purpose Dyneema® Ropes for the Stiesdal TetraSpar Demonstrator Binay Patel, Technology & Business Development Manager, Americas, DSM	
	Panel Discussion	
03:15 pm - 04:00 pm	Coffee Break (in exhibition area) hosted by Oceaneering	OCEANEERING
04:00 pm - 04:15 pm	Developer Keynote	
	Keynote : The Importance of Early Floating Wind Demonstration Projects Mikael Jakobsson, Founder and Chairman CIERCO, Floventis (CIERCO & SBM jv)	
04:15 pm - 06:15 pm	Serial Fabrication / Yard Selection / Availability & Suitability / Capacity	
	Just-in-time – Integrating the multi-model-supply chain to meet tight installation windows Stephanie De Decker, Business Development Manager Floating Offshore Wind, Boskalis	
	Serial Fabrication to Facilitate Commercial Scale Lars Samuelson, Manager, Offshore Accounts, Global Offshore, ABS	
	Principle Power WindFloat and Utility Scale Readiness Marco Wiedijk, Vice President Business Development, Principle Power	
	Unlocking the Massive Deep-water Wind Market Jon Salazar, Founder & President, Gazelle Wind Power	
	Mass Production of Concrete Floaters, Moving from Single Units to Commercial Wind Farms David Carrascosa, Director of Operations, Saitec	
	Adaptive Industrialization Tailored to Local Content Elizabeth Wibling, BD Manager Northern Europe & UK, Floating Offshore Wind, Technip Energies	
	Panel Discussion	
06:15 pm - 07:45 pm	Evening Reception (in exhibition area) hosted by RWE	RWE

**PROVEN TECHNOLOGY SUPPLIER
AND PROJECT CO-DEVELOPER
WITH THE HIGHEST LEVEL OF LOCAL CONTENT,
WHEREVER IN THE WORLD**





07:00 am - 08:00 am	Breakfast (in exhibition area) hosted by SBM Offshore	
07:00 am - 06:00 pm	Exhibit Hall Open	

08:00 am - 08:15 am Developer Keynote



Keynote : The Challenges of Installation and Construction as it Pertains to Vessels and Ports
Bo Jardine, Supply Chain Manager – Global Marine Category, Shell

08:15 am - 09:45 am Assembly and Installation



Pareto Shipbrokers AS, Installing Floating Turbines - The Role of AHTS in an Emerging Market
Inger-Louise Molver, Shipbroker & Analyst - Renewables, Pareto Shipbrokers AS



Hywind Tampen Project - Driving Commercialization With Collaboration
Karl Daly, Vice President Offshore Wind, DOF Subsea



Semisubmersible Wind Farm Installation Vessel, Enabling the Fast, Safe and Efficient Installation of Future Generation Wind Farms
Joop Roodenburg, President, Huisman



Developer & Installation Contractor Partnerships – The sensible way to commercialize projects
Emilie Reeve, EVP Offshore Wind, Havfram



Defining and optimizing strategy for floating wind installation in challenging environmental conditions
Raf Somers, Engineer – Advisor / Project Manager, IMDC

Panel Discussion

09:45 am - 10:30 am	Coffee Break (in exhibition area) hosted by Vryhof Group	
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10:30 am - 12:15 pm Operations & Maintenance (Life of Field)



A collaborative approach to de-risking and commercializing floating offshore wind: spotlight on major component exchange
Alistair Morris, Manager Floating Offshore Wind, The Carbon Trust



The Business Case for Structural Health Monitoring for Floating Offshore Wind
Wolfgang Ruf, Vice President, Acteon (Pulse Monitoring)



Review of LIDAR-assisted control for floating offshore wind
Marcus Marinos, Vice President, Wood



Hull Crawler Inspection of Floating Structures using Alternating Current Field Measurement (ACFM)
Jarime Baethge, Project Manager, Oceaneering



Large scale floating offshore wind projects: Tension Leg Platforms & the case for offshore in-situ maintenance strategies.
Bram Pek, Business Development Manager, Bluewater

Panel Discussion

12:15 pm - 01:15 pm	Lunch (in exhibition area) hosted by Doris	
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01:15 pm - 03:00 pm Design & Engineering



Challenges and Opportunities in Integrating Floating Offshore Wind
Melinda Marquis, Offshore Grid Integration Lead, National Renewable Energy Laboratory (NREL)



Accelerating the Deployment of Full-scale Floating Offshore Wind Farm – A Class Society’s Perspective
A showcase of recent outcomes from the PivotBuoy project
Dr. Qing YU, Director, ABS



Current State of the Art Floating Wind Turbine Design and Simulation
Chris Kubes, Principal Engineer, DNV



Cost Analysis of 15MW Platforms for Horizontal and Vertical Axis Turbines in the West Coast U.S.A.
Steffen Shelley, VP Renewable Energy, VL Offshore LLC



Offshore Floating Wind Turbines - Green Electricity for O&G Platforms
Izleeena Md Iqbar, Technology Manager, Petronas
Frank Adam, PhD, Lead Wind Engineering Division, GICON

Panel Discussion

03:00 pm - 03:45 pm	Coffee Break (in exhibition area) hosted by Vryhof Group	
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03:45 pm - 05:30 pm Floater Systems Adaption to Hydrogen Production



Economics of Green Hydrogen using Floating Wind: Projections Through 2035
Steven Jacoby, Senior Fellow, Boston University



The Dolphyn Project - Offshore Bulk Hydrogen Production
Phil Smyth-Tyrrell, Head of Practice: Design and Engineering, ODE Ltd.



Renewable energy driven integration of hydrogen in the Danish O&G sector
Anders Koeler, CEO, Floating Power Plant



Integrating Floating Wind with Energy Storage to Decarbonize Offshore Oil & Gas Installations
Saverio Ventrelli, Global Head of Sales - Offshore BESS, Siemens Energy AS



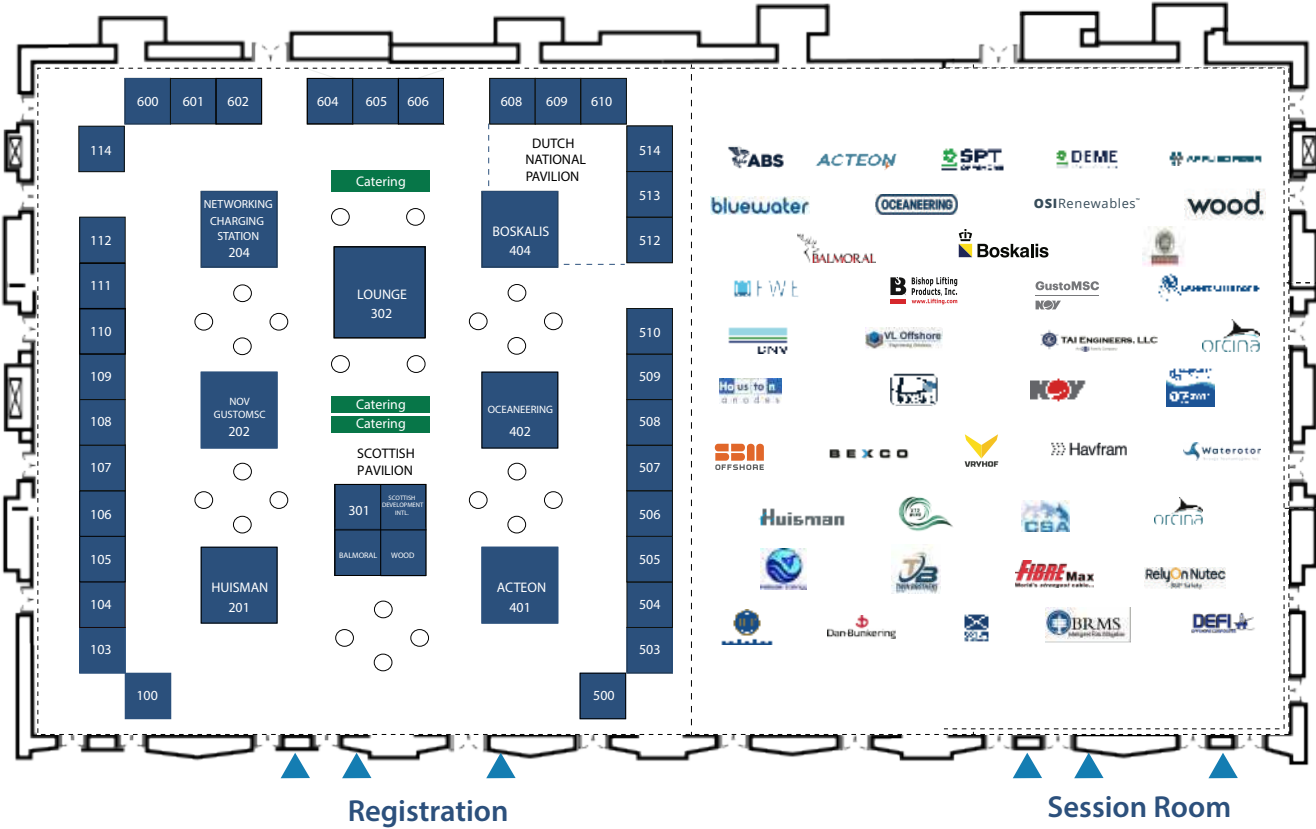
Offgrid/Ongrid Offshore Green Hydrogen Production & Wind Farm
Stephane Taxy, Vice President Operations, DORIS Group

Panel Discussion

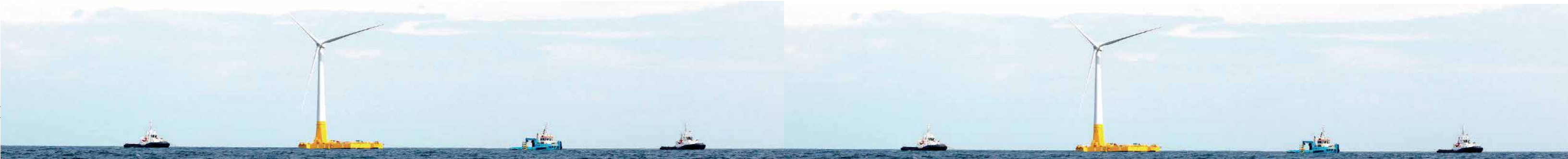
05:30 pm - 06:00 pm	Speaker Awards	
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2H Offshore	deugro (USA), Inc.	MODEC	Sonardyne
ABS	DNV	Mooreast Asia	SPT
Acadian Contractors	DOF Subsea	Mooreast Europe BV	Strana Offshore
Acteon	DORIS	Mundo Power	Stress Engineering Services, Inc.
Aker Offshore Wind	DSM	National Offshore Wind R&D	Subsea 7
Applied Fiber	EDF Renewables Development Inc.	NETSCo	Sumitomo Corporation of Americas
APPLIED FIBER	Edison Chouest Offshore	NKT	TAI Engineers
AqualisBraemar LOC	Elliott Bay Design Group	Norwegian Consulate General	Technip Energies
Aquila Engineering	Enbridge	NOV	TechnipFMC
Avangrid Renewables	EnBW North America	NOV-BLM	Tekmar
Baird & Associates	Ensearch Energy	NREL	Tenneco Deva
Ballast Technologies	Eolink	Ocean Winds	TerraSond
Balmoral	Equinor	Oceaneering	Thrustmaster of TX
Bancroft Financial LLC	Exmar Offshore Company	ODE	TotalEnergies
Bassoe Offshore	FibreMax B.V.	OEG Offshore	Twin Brothers
Bechtel Corporation	First Subsea	Offshore Design Engineering	University of Texas - Dallas
Benthic	Flintstone Technology Ltd	Offshore Source	Upstream
BEXCO NV	Floating Power Plant	Offspring International Ltd	UTEC Survey
Bishop Lifting	Floventis	Oglaend-System A/S	Ventolines, U.S.
BlackArch Partners	Focal Technologies Corp	Oil States Industries	Vesper Marine
Blue Water Shipping	Foss Maritime Company	Oil States Piper Valve	VL Offshore
BlueFloat Energy	Foster Marketing	OneStep Power Solutions Inc.	Vryhof
BlueFloat Energy Colombia	GAC North America	ONT	Wartsila North America
BLUNOVA SRL	Gazelle Wind Power	Orcina	Waterford Energy Services Inc
BOP Risk Mitigation	Georg Fischer Marine	Orsted A/S	Waterotor International Corp.
BOSKALIS	GICON	Osbit	Wood
Boston University	Global Maritime	OSI Renewables	World Forum Offshore Wind (WFO)
bp	GustoMSC	OWC Ltd	World Oil
Bridon-Bekaert	Harvey Gulf International Marine	Pareto Shipbrokers AS	X1 Wind
Bureau of Ocean Energy	Havfram	Pfisterer	Xodus Group
Bureau Veritas	HB Rentals	PMI Underwater Cable Solutions	
BW Ideol	Heerema	Principle Power	
Bygging-Uddemann	Hellenic Cables	Proceanic	
C-Job Naval Architects	Heron Offshore	Proserv	
Carbon Trust	Hexicon	Prysmian	
Carlo Maresca SpA	Hilman Rollers	Pulse Monitoring	
Castle Wind	Hitachi Energy	Quest Floating Wind Energy	
Cerulean Winds	Hornbeck Offshiee	Quest Offshore	
CIERCO	Houston Anodes	Ramboll	
CIMC Raffles	Huisman	Recharge	
Clarksons	Iberdrola	RelyOn Nutec	
Clearway Energy	IMDC	Renews	
Core Group Resources	Intermoor	RWE Renewables	
Cortland Company	Irizar Forge	Ryder Geotechnical	
COSCO SHIPPING Heavy Transport	Jumbo Offshore	Saipem	
COWI	KenzFigee	Saitec Offshore Technologies	
Crowley Maritime Corporation	Keppel Offshore & Marine USA	SBM OFFSHORE	
CSA Ocean Sciences	Keystone Engineering Inc	SCHLUMBERGER	
Dan Bunkering	Knowix	Scottish Development	
David Evans & Associates, Inc.	Kongsberg Maritime	Scottish Power	
Deep Wind Offshore	Maersk Supply	Seasystems	
DeepWater Buoyancy	Maersk Supply Service	Shell	
DEFI Offshore Composites	Mammoet Americas	Shell Renewables and Energy Solutions	
Delmar Systems	Manson Construction Co.	Siemens Energy	
Delta Wind Partners	Marine Energy Corporation	Simply Blue Energy	
DEME	MATTHEWSDANIEL	SOFEC	



EXHIBITORS BY BOOTH #				EXHIBITORS ALPHABETICALLY			
100	SBM Offshore	503	Applied Fibers	ABS	104	Houston Anodes	606
103	Bishop	504	Bassoe	Acteon	401	Huisman	201
104	ABS	504	CIMC Raffles	Applied Fibers	503	NOV GustoMSC	202
105	Proceanic	505	Bexco	Balmoral	301C	Oil States	112
106	Havfram	506	DNV	Bassoe	504	Orcina	108
107	BOP Risk Mitigation	507	VL Offshore	Bexco	505	Proceanic	105
108	Orcina	507	Un. of Texas - Dallas	Bishop	103	Quest Offshore	509
109	CSA Ocean Sciences	508	DeepWater Buoyancy	Bluewater Energy	609	Quest FWE	510
110	Waterotor	508	Tekmar	BOP Risk Mitigation	107	Oceaneering	402
112	Oil States	509	Quest Offshore	Boskalis	404	RelyOn Nutec	602
114	Dan Bunkering	510	Quest FWE	Bureau Veritas Podcast	605	SBM Offshore	100
201	Huisman	512/513	SPT/ DEME	Charging Station	204	Scottish Development	301B
202	NOV GustoMSC	600	Twin Brothers	CIMC Raffles	504	SPT/ DEME	512
204	Charging Station	602	RelyOn Nutec	CSA Ocean Sciences	109	TAI Engineers	500
301B	Scottish Dev. Intl.	604	HiSeas Energy	Dan Bunkering	114	Tekmar	508
301C	Balmoral	605	Bureau Veritas Podcast	DeepWater Buoyancy	508	Twin Brothers	600
301D	Wood	606	DEFI	DEFI	606	University of Texas - Dallas	507
401	Acteon	606	Houston Anodes	DNV	506	VL Offshore	507
402	Oceaneering	608	Vryhof Group	Fibremax	610	Vryhof Group	608
404	Boskalis	609	Bluewater Energy	Havfram	106	Waterotor	110
500	TAI Engineers	610	FibreMax	HiSeas Energy	604	Wood	301D





The Quest DNA

Within Q FWE our team assembles over 100-years of experience and professional networks focused to provide economic, technical and commercial Clarity, Insight and Vision. Backed by twenty-years of expertise in data analytics, analysis and the development of offshore and deepwater projects provides us with the means and the network to offer critical insight on the Offshore Wind industry going forward. Q FWE has created a dedicated offshore wind projects database covering both fixed and floating solutions. Our proprietary Q Vision tool tracks and monitors projects and their supply chain from early planning to commissioning and O&M. This dynamic tool provides a continuous feed of strategic insight, tactical information and robust data analytics throughout each stage of the supply chain.



Q Vision

Q Vision is our proprietary Business Analytics' tool delivering real-time data and analysis giving you a competitive advantage to win Fixed and Floating Offshore Wind Energy projects. This Microsoft Power BI tool allows for dynamic analysis of relationships across markets and technologies; robust benchmarking as well as an enhanced understanding of project economics including LCoE. Q Vision offers 15 different "lenses", each offering a unique perspective on this fast growing industry. Once parameters have been set, the user can view a data table of all projects contained in the results through the Full Project Data lens.

Q FWE's Q Vision system tracks over 200 data fields for all floating wind energy projects in all stages of development bottom-fixed projects. This dynamic tool provides a continuous feed of strategic insight, tactical information and robust data analytics throughout each stage of the supply chain.

Research - Market Data - Consulting

Global Floating Wind Market and Forecast Report 2021 – 2034, Volume 3

This comprehensive 115-page market report dedicated to Floating wind illustrates the tremendous market opportunities globally across the supply chain over the next ~15 years including the most active developers, potential market size, pertinent project activity details and other vital metrics illustrated by region and construction timeline. Q FWE Market Reports are compiled from our real time Q Vision business analytics tools and 'deep' data which are the leading industry source for Bottom-fixed and Floating wind.



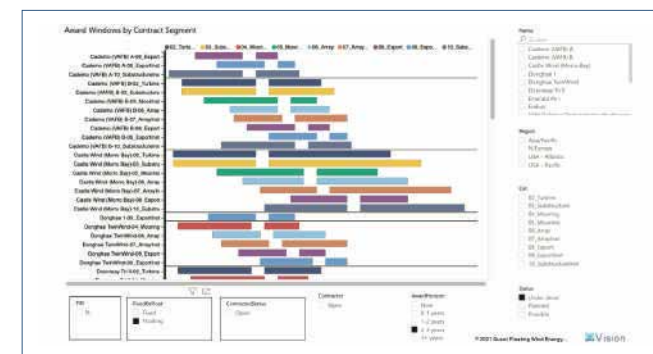
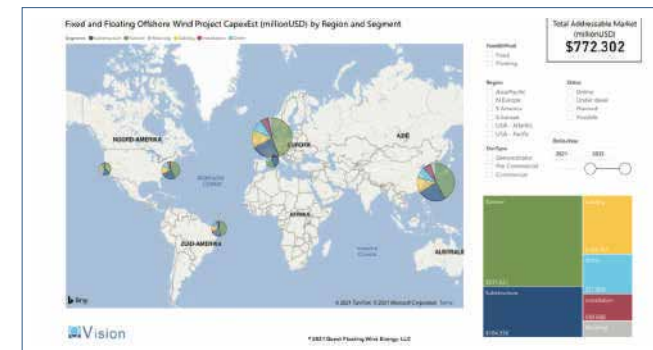
Quest Offshore Wind Turbine Index QOWTI

Quest Offshore Wind Turbine Index (QOWTI) illustrates the Total Addressable Market for global Offshore Wind. QOWTI spots important leading indicators such as average rotor diameter, average distance to shore, average MW per unit, average number of units per project in addition to benchmarking of key metrics and CapEx trends. Gain access to the world's most definitive reference index for the global offshore wind market.



Q Vision: CapEx LCoE - your eyes on the market

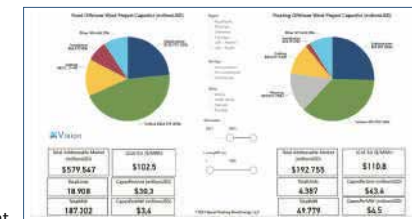
This annual access tool allows the user to investigate numerous market facets of the Offshore Wind market. The Q Vision CapEx module offers 15 distinct lenses covering the value of supply chain segments Floater, Turbine, Mooring, Cabling and Installation. The different lenses focus on developer, designer and regional differences for the future total spend—Total Addressable Market, as well as numerous tools to analyze LCoE. Includes backing data in MS Excel.



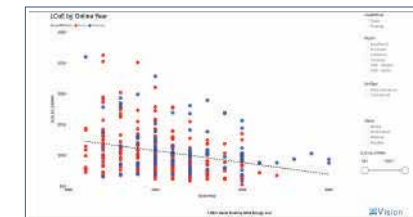
Q Vision: Offshore Turbine Locator - the helicopter view

Easy access to the world's most accurate data on the Offshore Wind market. Quest is currently tracking 400+ projects encompassing 18,000+ individual turbines (of these 119 are floating projects with over 2,500 turbines). Included are projects currently under development, planned, as well as possible.

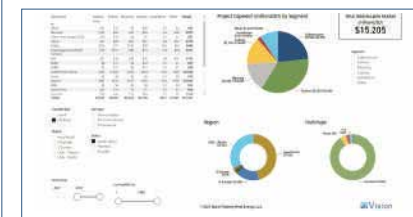
The Offshore Turbine Locator tracks both Bottom-Fixed and Floating Offshore Wind Projects by total MW bubble size on a world map, cumulative total MW to 2033 and beyond, and cumulative Total MW by country. Each page has filters for Status, Region, Fixed or Floating, Development Type and Startup Year range. Includes backing data in tabular format on Page 9 and an MS Excel download.



Compare Fixed & Float



LCoE by COD & TotalUnits

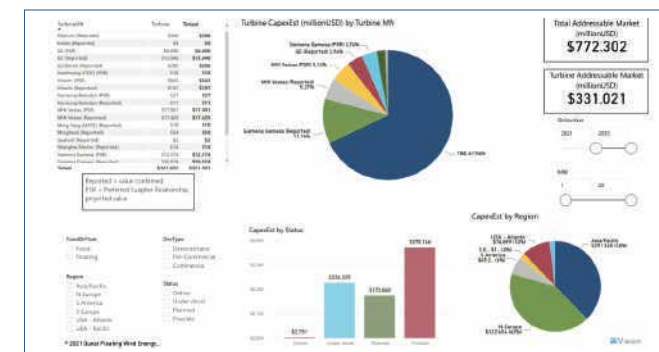


CapEx by Region, Hull Shape and Segment

Q Vision: Supply Chain Opportunities - get ahead of the curve

Easy access to the world's most accurate data on the Offshore Wind market Supply Chain Opportunities, contract sequencing and open awards.

The Q Vision subscription service is a dynamic platform in Microsoft Power BI enabling our clients efficient mining of our comprehensive project data into dynamic charting which provides quick actionable insights supported with full project details. These analytical tools are essential for forecasting and very useful for getting a quick overview of the potential future market for Turbines, Substructures, Moorings, Subsea Power Cables, Installation services and ultimately O&M activities



CREATING NEW HORIZONS



Boskalis creates new horizons for all its stakeholders. As a leading global dredging contractor and marine services provider we offer a unique combination of experts, vessels and services. Within the offshore wind industry Boskalis has a successful track record in providing services throughout every phase of an offshore wind project.

Using this experience, combined with our transport and installation solutions, we have the ability to execute and optimize the logistics and installation for floating wind farms. In this relatively new market we already established a track record for the transport of floating foundations and the transport and installation of complete floating wind turbines.

More information? offshorewindsolutions.boskalis.com



TOTAL MOORING SOLUTIONS



Vryhof is a trusted partner to many of the offshore industry's leading companies, delivering innovative and customer-focused anchoring and mooring solutions. We are committed to the highest standards of safety and integrity and are proud of our legacy and impeccable track record, delivering value in everything we do. Our 50-year history of setting standards and leading the way in the offshore sector makes us unique

in terms of our expertise and breadth of services. In recent years, Vryhof and its installation partners have taken full scope permanent mooring projects for offshore oil & gas and floating offshore renewables by offering innovative and cost effective solutions including design, procurement, installation, life extension and decommissioning. Vryhof consists of: Deep Sea Mooring and Vryhof Anchors.

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