

# **DE-RISKING OFFSHORE WIND PROJECTS A CONTRACTOR'S PERSPECTIVE**

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**BOSKALIS OFFSHORE ENERGY**

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**WIND FINLAND OFFSHORE  
HELSINKI - MAY 2023**



# BOSKALIS INTRODUCTION - COMPANY OVERVIEW



**9,600**  
Employees

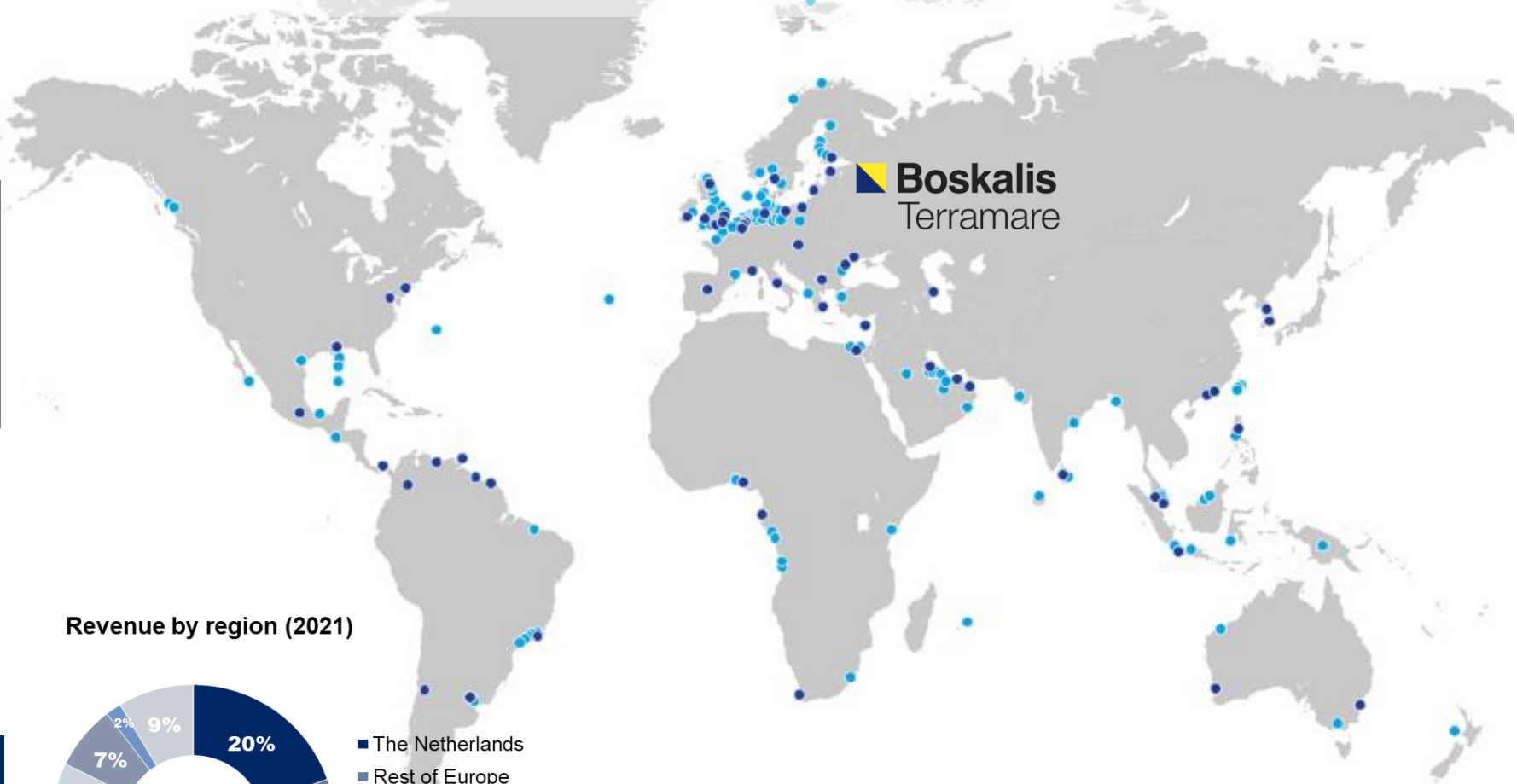
**90**  
Countries

**700**  
Vessels

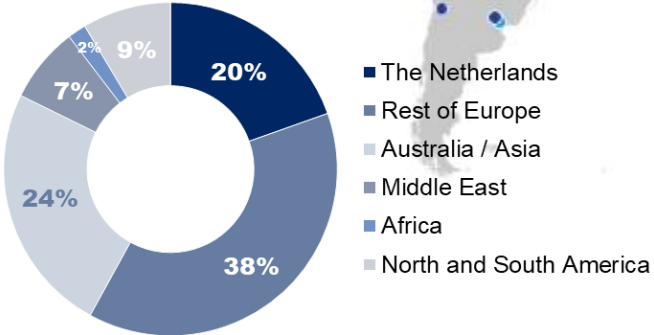
2022  
**EUR 3.58bln**  
Revenue

**100+**  
Years track record

2022  
**EUR 6.11bln**  
Order Book



Revenue by region (2021)



● Offices  
● Projects and operations



# THREE BOSKALIS DIVISIONS

## OFFSHORE ENERGY



## DREDGING & INLAND INFRA



## TOWAGE & SALVAGE





# BOSKALIS TERRAMARE



**PORT AND HARBOUR PROJECTS**



**FAIRWAY PROJECTS**



**OFFSHORE PROJECTS**



**QUAY WALL PROJECTS**










# Boskalis offshore wind experience

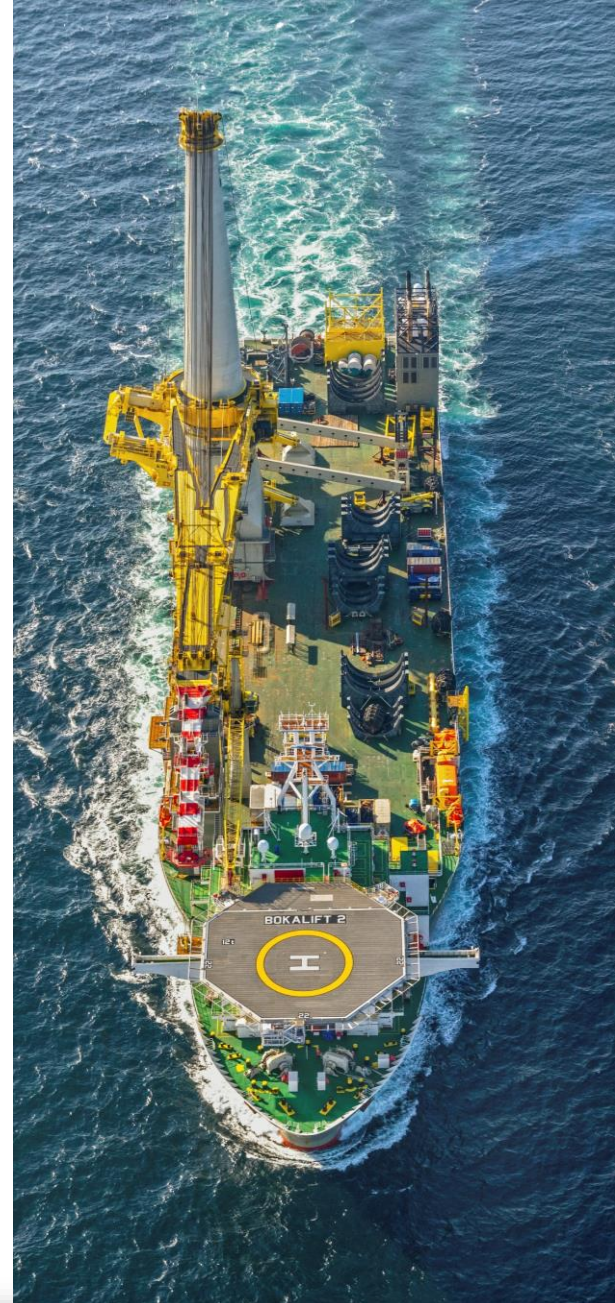


Out of the approx. 200 offshore wind farms currently in operation Boskalis has been involved in the development of a 100 with offshore services ranging from: Transport and Installation of Foundations and Sub-Station, Long Haul Transport, Inter-Array installation, termination and testing, Export Cable installation and land-falls, Transport and Installation of Floating Wind Foundations, Scour Protection Installation, Sea-bed levelling, UXO identification and Removal, Geotechnical Surveys, Offshore Wind Removal Works



# Offshore Energy - Renewables

Survey		Geophysical and geotechnical survey / UXO works	
Subsea Services		IRM & light construction with air and saturation diving and ROV services up to 300m water	
Marine Services		Wet tow and installation of floating structures, offshore services with AHTs, CSVs, sheerlegs & barges	Floating Wind
Seabed Intervention		Seabed preparation, subsea rock installation, landfall construction	
Heavy Marine Transport		Dry transport of heavy structures	
Offshore Heavy Lifting		Offshore heavy lifting for Offshore wind (foundations & substations, Balance of Plant contracting) and Oil & Gas (fixed platforms, decommissioning)	Fixed Wind
Subsea Cables		Offshore wind export and array cables	Fixed & Floating Wind





# Our offshore wind – Project Activities



Survey



Cabling



Engineering



Logistics



Mobilisation



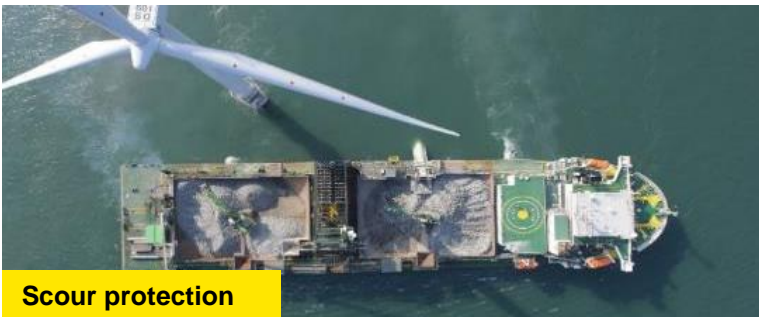
Transport



Installation



Secondary works



Scour protection

# Offshore Wind in Finland

## Ongoing

- Tahkoluoto Extension 720MW
- Korsnäs – Forststyrelsen 1.4 GW

## Tender 2023 / 2024

- 6GW APR 2023 - Project execution > 2028
- Permitting and approvals

## Local readiness

- Port Developments
- Local Supply Chain
- Contractor's local knowledge / Soil



## Be aware!

- Competition with European / US / APAC Offshore Wind Developments in 2028 - 2030
- How do we make Finnish Offshore Wind a success story?

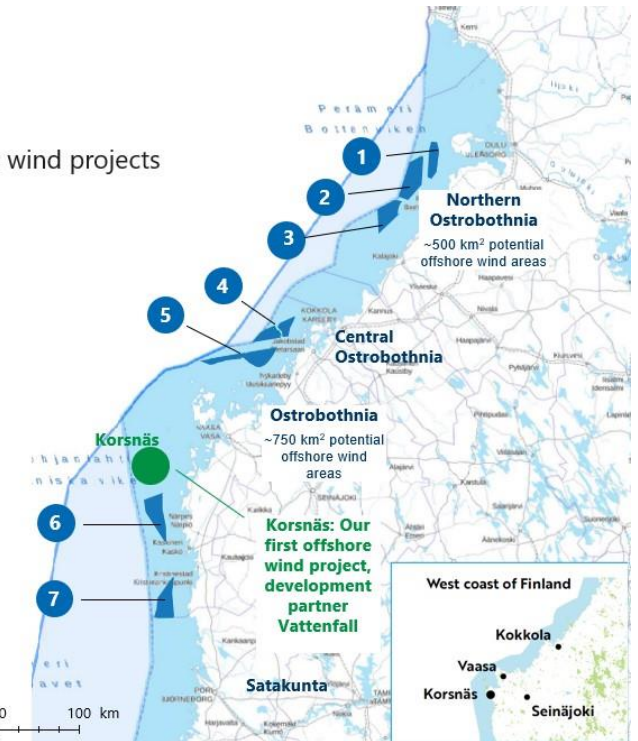
## Potential offshore wind areas on Finnish territorial waters

Finnish west coast has attractive conditions for offshore wind projects due to the suitable water depth and seabed geology.

1. Area: approx. **120 km<sup>2</sup>**  
Siikajoki and Hailuoto
2. Area: approx. **200 km<sup>2</sup>**  
Raahe, Siikajoki
3. Area: approx. **160 km<sup>2</sup>**  
Pyhäjoki, Raahe
4. Area: approx. **150 km<sup>2</sup>**  
Pietarsaari, Luoto and a minor area of Uusikaarlepyy
5. Area: approx. **200 km<sup>2</sup>**  
Uusikaarlepyy, minor areas of Vöyri and Mustasaari
6. Area: approx. **180 km<sup>2</sup>**  
Närpiö
7. Area: approx. **180 km<sup>2</sup>**  
Kristiinankaupunki

-  Finnish territorial waters
-  Exclusive Economic Zone (EEZ)

Copyright: Esri Finland 0 25 50 100 km





# De-risking Offshore Wind

## Painting the picture, some examples:

- Ambitious Government Goals
- Energy Crisis
- CAPEX inflation
- Finance
- Growth of Industry to reach 'Maturity' in development
- Technical advancements WTG sizing growth
- From subsidized to merchant risk
- Late FIDs
- Project delays / postponements





# De-risking Offshore Wind



## Effects

- Human Capital & Capacity to meet targets
- Sustainability of offshore renewables contracting
- Risk profile
- High volatility in pricing
- Losses / Limited upside & recovery potential
- Technical developments
  - Vessels
  - Tooling

*"Marine contracting in offshore renewables has become increasingly unsustainable, which in turn places the long-term sustainability of the offshore wind energy industry at risk. This situation can only be reversed with a fairer allocation of risks and the shared alignment of project goals between government, investors, developers, and the supply chain."*

*"An allocation of risk that recognises the reality of offshore construction and reflects the need to encourage the development of increasingly technologically advanced project solutions. Greater flexibility and fairness is needed by allocating the risk to the Party who created it, or is best placed to manage it, and take responsibility for it."*

*"Contractors are well used to taking project risks, which have limited upside but cannot have unlimited downside. For this industry to be sustainable it needs to be economically sustainable for all stakeholders."*

<https://www.imca-int.com/global-offshore-wind-energy-targets-at-risk/>

**Rabobank** *The Bottlenecks Challenging Growth in the EU Offshore Wind Supply Chain*

<https://www.rabobank.com/knowledge/d011354306-the-bottlenecks-challenging-growth-in-the-eu-offshore-wind-supply-chain>



**Offshore wind vessel availability until 2030:  
Baltic Sea and Polish perspective**

<https://windeurope.org/wp-content/uploads/files/policy/topics/offshore/Offshore-wind-vessel-availability-until-2030-report-june-2022.pdf>



# De-risking Offshore Wind – How?

## Solution, or how to start?

- Fair allocation of risks and project goals between developers / financing parties / contractors
- Close cooperation and objectives ‘win-win’
- Partnership structures
- Portfolio approach – security in demand / supply
- Alternative contracting strategy - Services
- Added value – Risk v. Reward
- Holistic approach – T&I versus Logistical Solution





# CREATING NEW HORIZONS

