DeepWind - INTOG

GoliatVIND

75MW demonstration project in Norway

Aberdeen

16 th April 2024

Kenneth Fossøy

EVP Business & Project Development

Accelerating floating offshore wind…..

Kansai Electric Power
power with heart

Offshore-Energy.biz | offshoreWIND.biz | DredgingToday.com | NavalToday.com | Exhibition and Conference

offshoreWIND.biz | Fixed-Bottom | Floating Wind | Supply Chain | Power-to-X | Grid Connection

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Norwegian Floating Offshore Wind Project Gets EUR 175 Million Boost

BUSINESS & FINANCE

March 11, 2024, by Adnan Memija

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Odfjell Oceanwind, Source Galileo, and Kansai Electric Power Company have received NOK 2 billion (approximately EUR 175 million) in state funding from Norwegian government agency Enova for its GoliatVIND floating offshore wind project.

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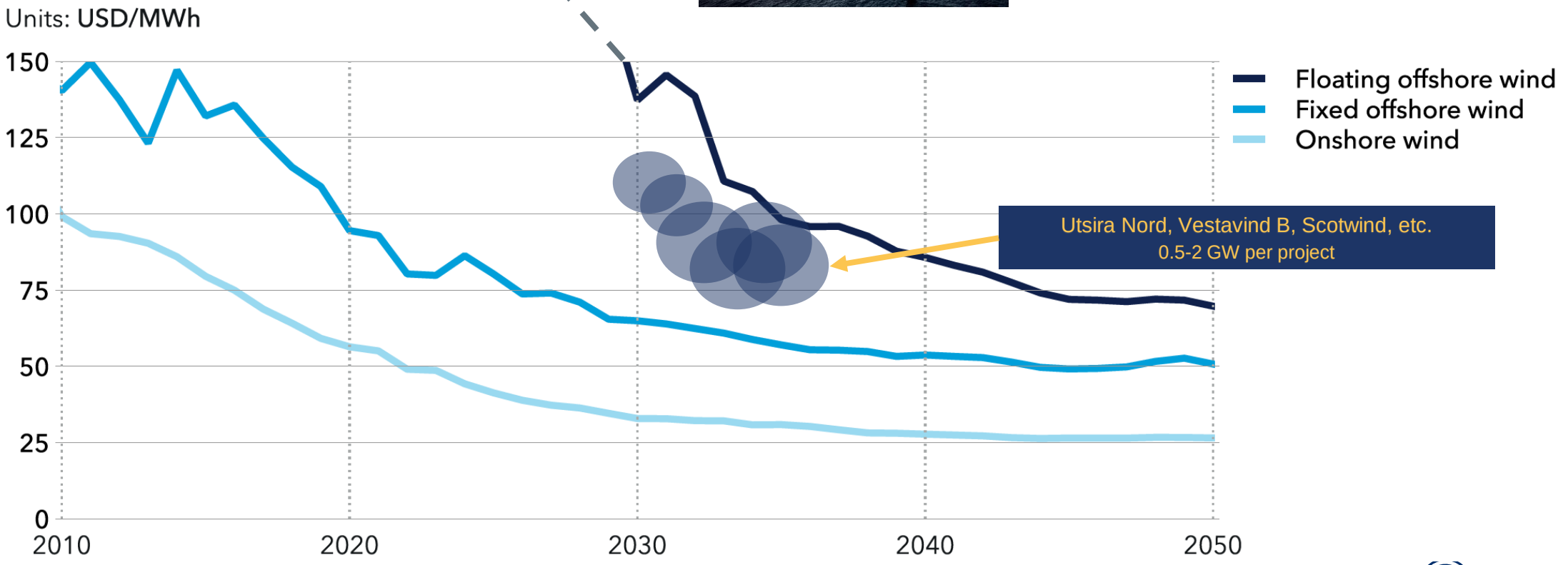
Making floating offshore wind relevant – low cost, high scale, minimum negative impact

Kincardine
5x10MW=50MW

Hywind Tampen
11x8.6MW=95MW



Graph: DNV 2023. Projects: OOW (illustrative)

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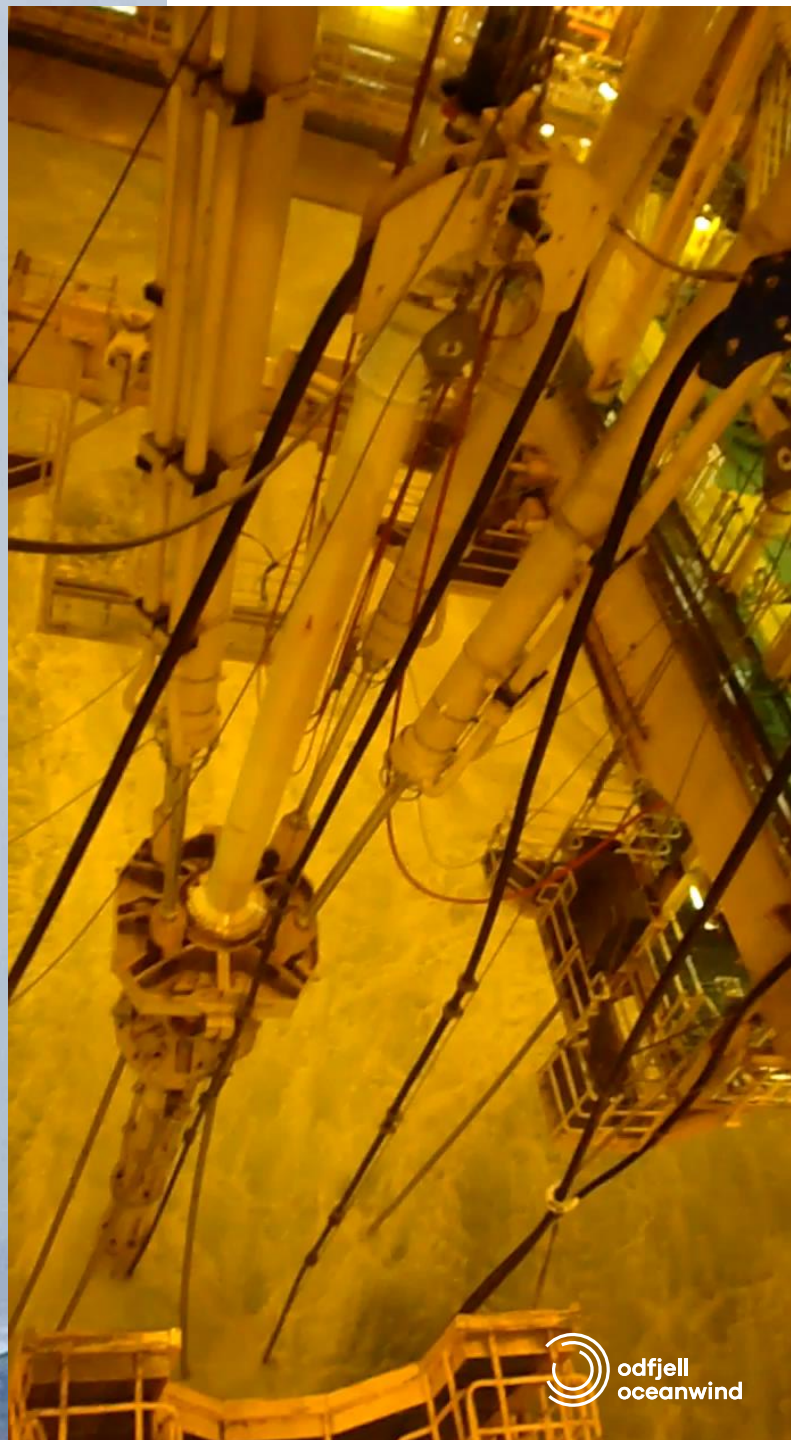
Floating offshore wind in «harsh environment»

"Extreme waves, winds, currents, snow, ice, and fog that hinder operations and cause structural failures of critical offshore infrastructures"



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The Odfjell companies

OSLO BØRS

odfjell drilling

A global leader in harsh environment semisubmersible drilling operations

Operations
Semisubmersible
Mobile Drilling Units

OSLO BØRS

odfjell technology

An integrated supplier of offshore operations, well services technology and engineering solutions

Operations
Fixed & Jackup
Mobile Drilling Units

Well Services

Projects &
Engineering

Private

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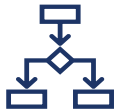
A leading floating offshore wind specialist

Design

Floating
Wind
Solutions

Develop

Project
Development



Deliver

Project
Execution &
Operations
Management

~1 billion USD market cap | ~5000 employees

~50 employees

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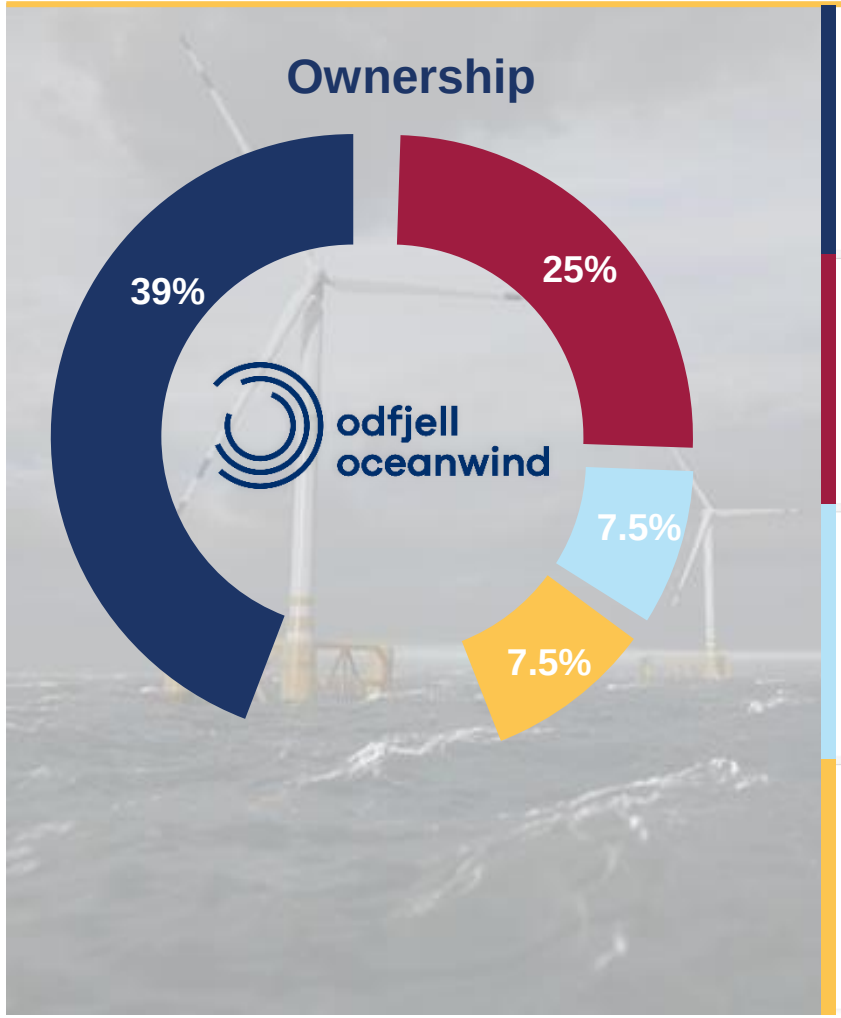
Backed by complementary equity partners with solid industry background



odfjell technology	***International technology and engineering company delivering specialist services, equipment and competence across the offshore energy value chain***	▪ Project management and engineering ▪ Drilling operations ▪ Well services ▪ Integrity and inspection
MOL Mitsui O.S.K. Lines	***A leading shipping company, operating on a global scale with about 800 vessels in service***	▪ Maritime supply chain services for offshore wind farms ▪ Offshore wind development
ANEO	***A partnership between HitecVision and TrønderEnergi, established to focus on renewable energy-production***	▪ 2nd largest operator of onshore wind in the Nordic region ▪ Strong technology base for wind power production ▪ Energy management services
THE BLYSTAD GROUP	***+30 years of building long term value through sound operational and strategic management combined with financial expertise***	▪ Investments and experience within real estate, shipping, private equity renewables and capital market sectors ▪ Strong track record of successful investments

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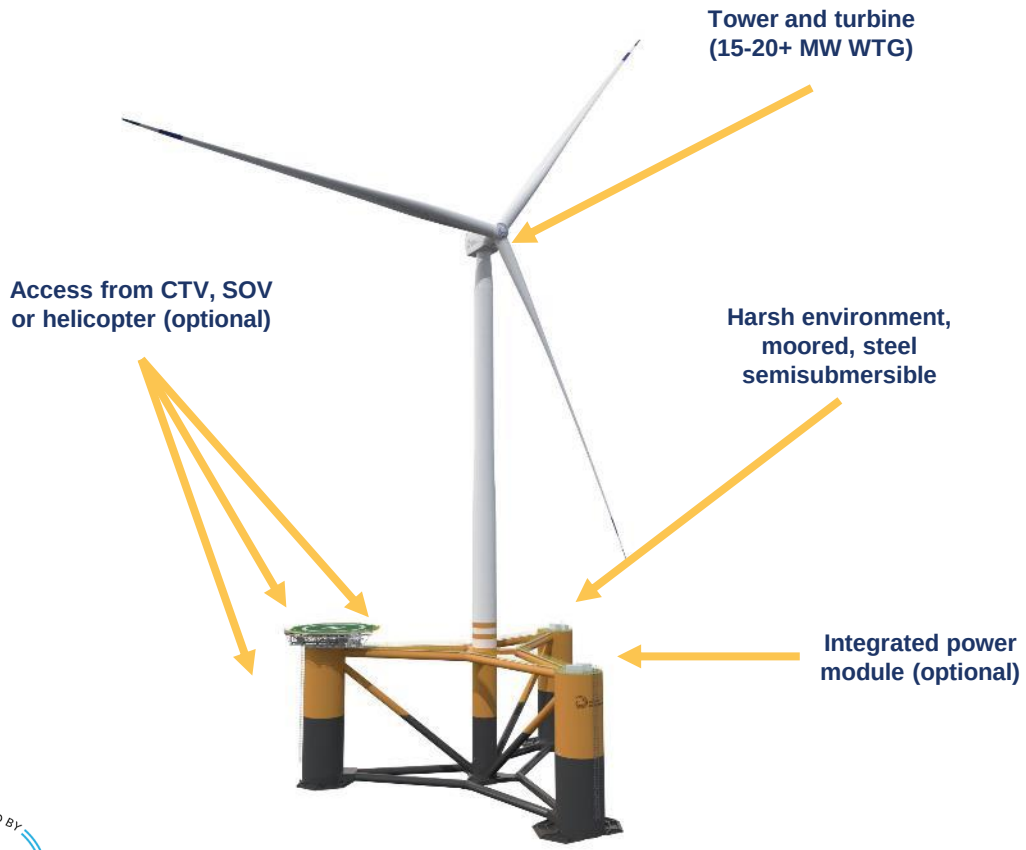
Deepsea Star™ - a multi-location FOWU design for mass production

Deepsea Star™ column-stabilised steel semisubmersible FOWU design…

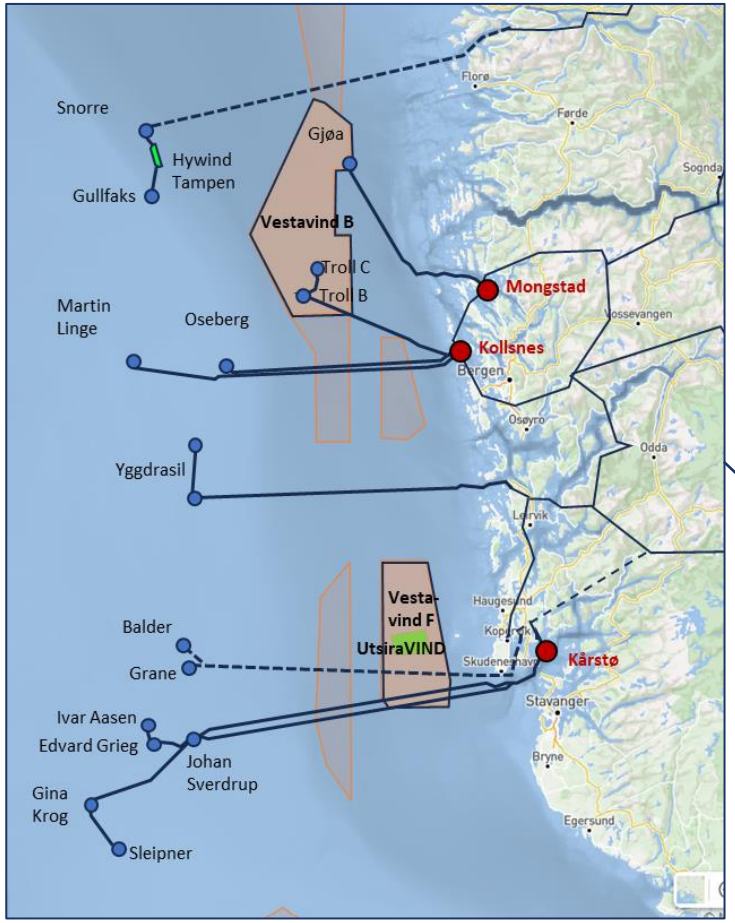


Basic design approval from DNV ongoing for 15MW WTG

…designed for large WTGs in harsh environments

- Standardised to a multi-location, harsh environment, design basis
- Configurable to project specific requirements, incl. benign areas
- Scalable to next generation WTGs >20MW
- Designed for lifecycle structural integrity and maritime class regime
- Designed for industrial, efficient and low cost production with minimum infrastructure needs for local assembly and installation
- Low carbon footprint

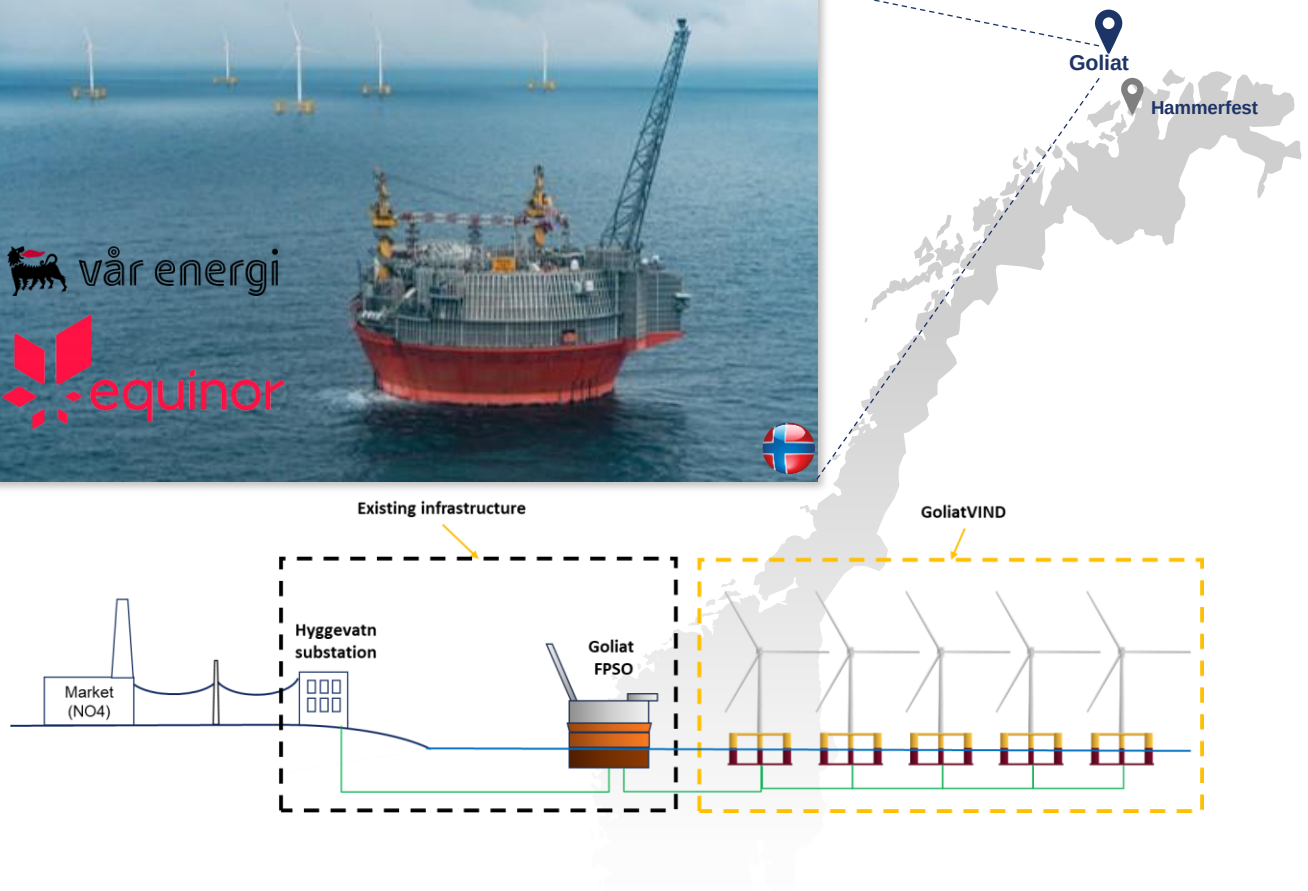
Grid connection already in place from existing petroleum infrastructure



1.6 GW of power from shore cable capacity

GoliatVIND – a demo project for floating wind technologies in the Barents Sea

- **Location:** Hammerfest, Barents Sea, Norway
- **Technologies**:
  - Deepsea Star™, multi-location design
  - 15MW 236m WTG
  - Subsea sub station (base case)
- **Consenting:** Fast track consenting under Ocean Energy Act §2.2 for demo parks (no competition)
- **Grid connection**: exclusive rights to use existing Goliat infrastructure to connect to the onshore grid
- **Offtake**: National strategy to electrify O&G asset with offshore wind – program to be announced Q2
- **Soft funding**: awarded 2bn NOK (~175m EUR) from ENOVA in March 2024
- **Project financing**: ongoing process with highly reputable financing institutions
- **Partners:** Odfjell Oceanwind, SOURCE GALILEO, Kansai Electric Power (power with heart)



5
Floating wind turbines

15MW
Turbine capacity with the Deepsea Star™

330GWh
Potential annual power production

2028
Targeted COD

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GoliatVIND – key milestones until commercial operation date

1) Possibility of project acceleration for target COD in 2027

What is required to pass Financial Close?

EPCI manager / OOW lead

Owner / Partner lead

Gallagher Insurance | Risk Management | Consulting

Project financing

Reputable international banks

DNV

Lenders Technical Advisor (LTA) SOW

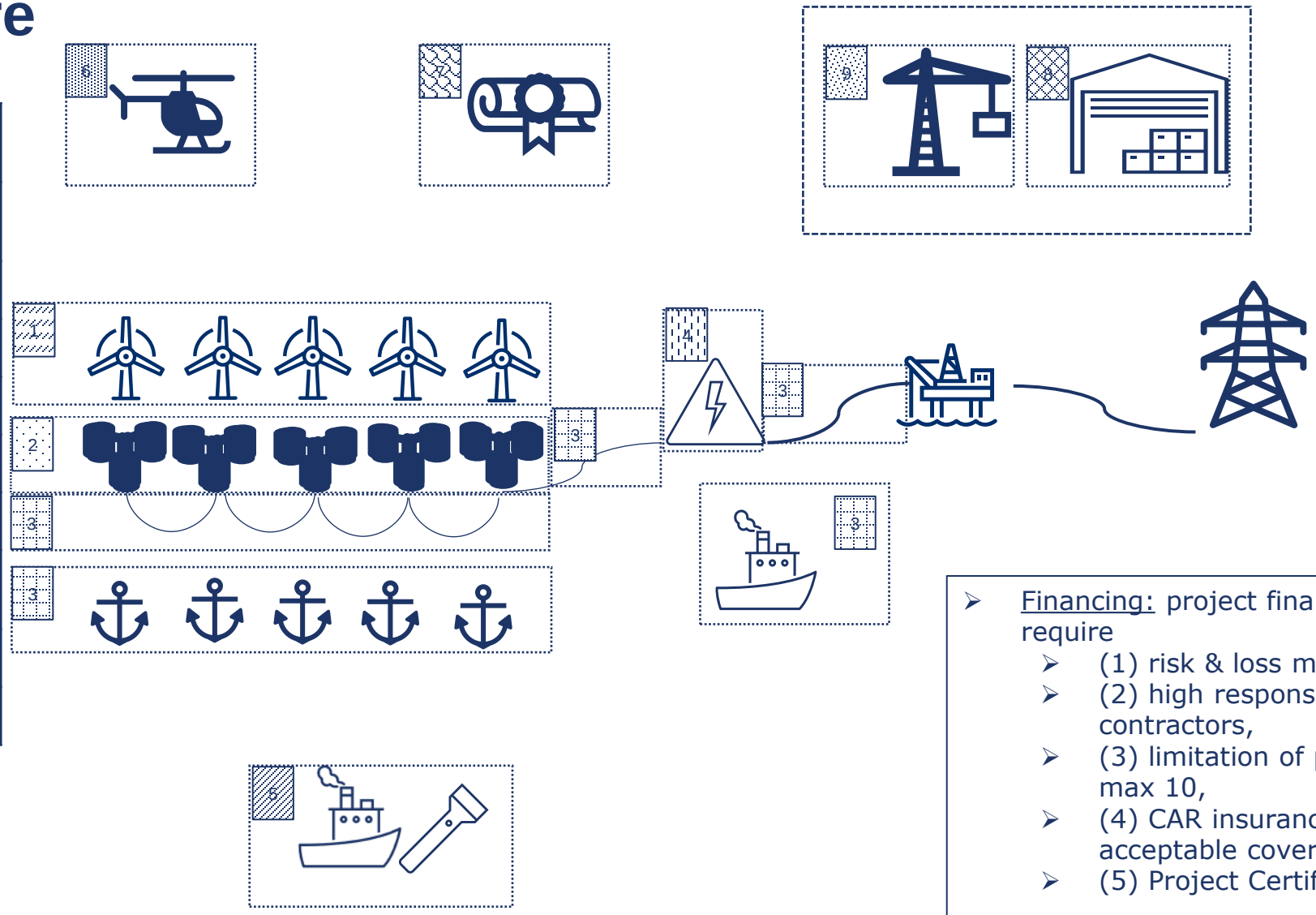
Project setup, participants and resources

Project risk management & certification strategies

Technical concept		Project execution & supply chain			Financial modelling		Permits and licenses
Site conditions evaluation	Design & technology choices	Project execution strategies	Project execution plans	Supply chain & contracts	*Revenue*	*Cost*	*Seabed lease*
Seabed data	*Park layout and maturity*	*Fabr., inst. & commissioning strategies*	*Project schedule*	*Supplier Contracts*	*Annual energy production*	*Financing costs*	*Grid connection*
Metocean data	*Floater design and maturity*	*Supply chain strategy with scope split*	*HSE & Quality plans*	*Price & payment*	Offtake/ revenue	*Adequacy of cost est. and contingencies*	*Concessions*
Wind data	*Mooring design and maturity*	*O&M strategy and lifecycle integrity mgmt.*	*CAPEX OPEX DECEX*	*Schedule & termination*	*Stress test*		
	Export system design and maturity	*Decom and recycling strategy*		*Warranties & liabilities*			

Contract Structure

No	Scope	Form of Contract
1	WTG Supply, Service and Maintenance	WTG OEM Contract (Fidic Based)
2	Hull	Fidic Based
3	Marine, Cables, anchoring,	Fidic Based
4	Power Export System	Fidic Based
5	Seabed Survey	Logic or Bimco
6	Helicopter Transport	Operator proposed
7	Project Certification and Marine Warrenty Surveyor	OOW Standard terms and conditions modified
8	Installation Site	OOW Yard Stay Contract
9	Heavy Lift Crane	Operator Standard



- Financing: project finance will require
  - (1) risk & loss mitigation,
  - (2) high responsibility of contractors,
  - (3) limitation of packages to max 10,
  - (4) CAR insurance with acceptable coverage
  - (5) Project Certification.

Evaluation of quotes

RFQ Q2-24

In preparation

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Are we ready to scale to GW projects?

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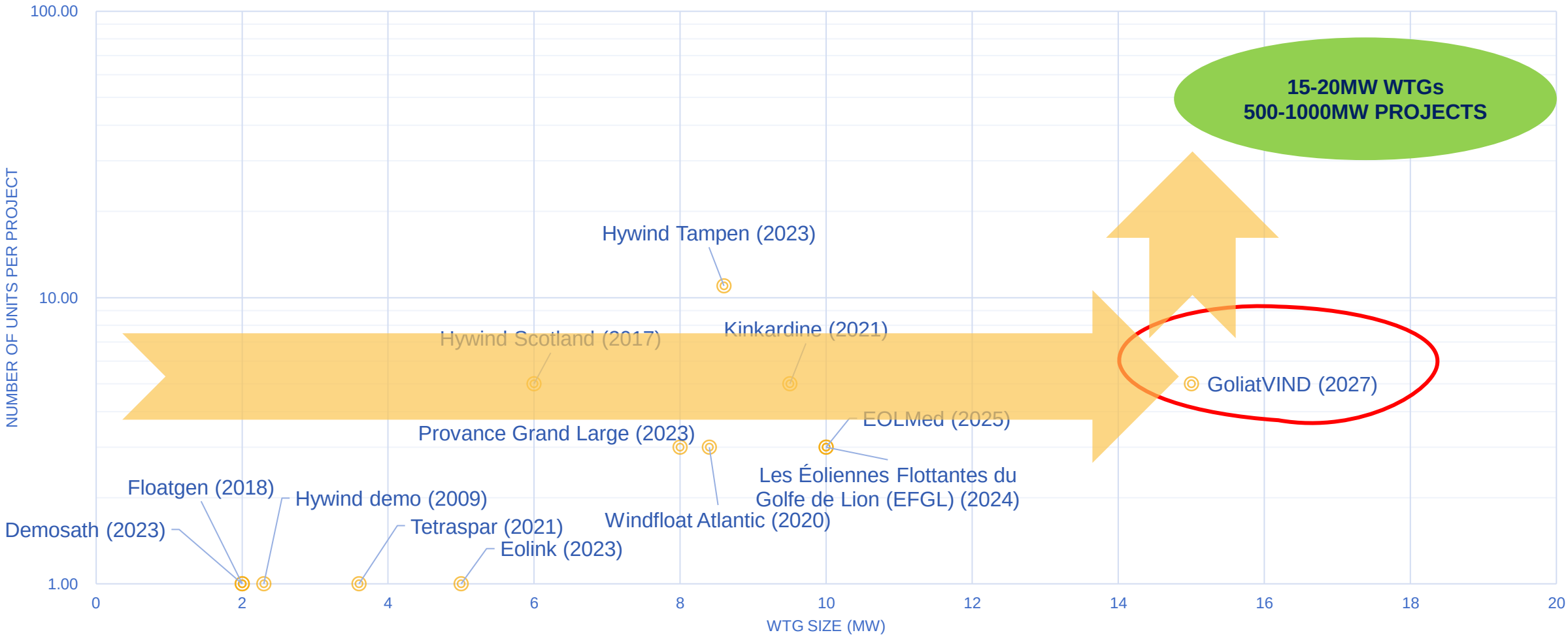
We need to demonstrate relevant technologies before scaling



WINDSTEEL TECHNOLOGIES

When the Supply Chain does not fit your purpose then you have to develop one that does

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Prodtex
Production / Technology / Excellence

The end

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