



Energy for generations

**DRIVEN TO MAKE
A DIFFERENCE**

NET ZERO

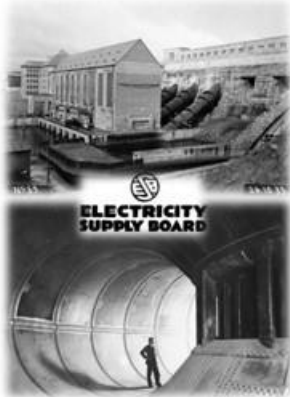
**BY
2040**

Malin Sea Wind

OVERVIEW OF ESB



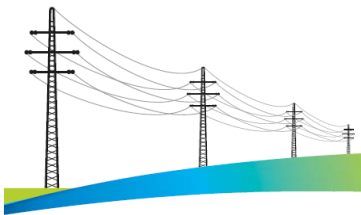
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- Established 1927 - leading Irish diversified and vertically integrated utility
- c. 96% Government-owned
- Operating in Ireland and Great Britain
- c. 8,000 employees
- *Driven to Make a Difference: Net Zero by 2040* strategy empowering low carbon living



REGULATED NETWORKS



ESB NETWORKS

NIE NETWORKS

- Owner of the Regulated ROI & NI transmission & distribution networks
- *Net Zero by 2040* focus is to enable the connection of increased renewable and distributed generation

GENERATION



GENERATION & TRADING

- ≈ 33% share of generation in all island market (ROI & NI).
- Operational portfolio of ≈ 5.5GW (thermal + renewable) across ROI, NI & GB.
- *Net Zero by 2040* focus is to transition the generation portfolio to low carbon technologies

CUSTOMER SOLUTIONS



ELECTRIC IRELAND

ESB ENERGY / SO ENERGY

- Customer facing businesses including supply of electricity, gas and smart energy services in Ireland and GB.
- Supply ≈ 40% of all Ireland market and ≈ 1.5 million customers throughout ROI, NI & GB.
- *Net Zero by 2040* focus is to provide smart energy services to customers including EV infrastructure roll out

OUR FUTURE – DELIVERING OUR NET-ZERO AMBITION



Renewables > 30 GW



Backup Dispatchable Zero-Carbon Power & Flexibility > 10 GW

ESB's Net Zero by 2040 will be delivered by an Integrated Zero Energy System



Hydrogen Production > 10 GW



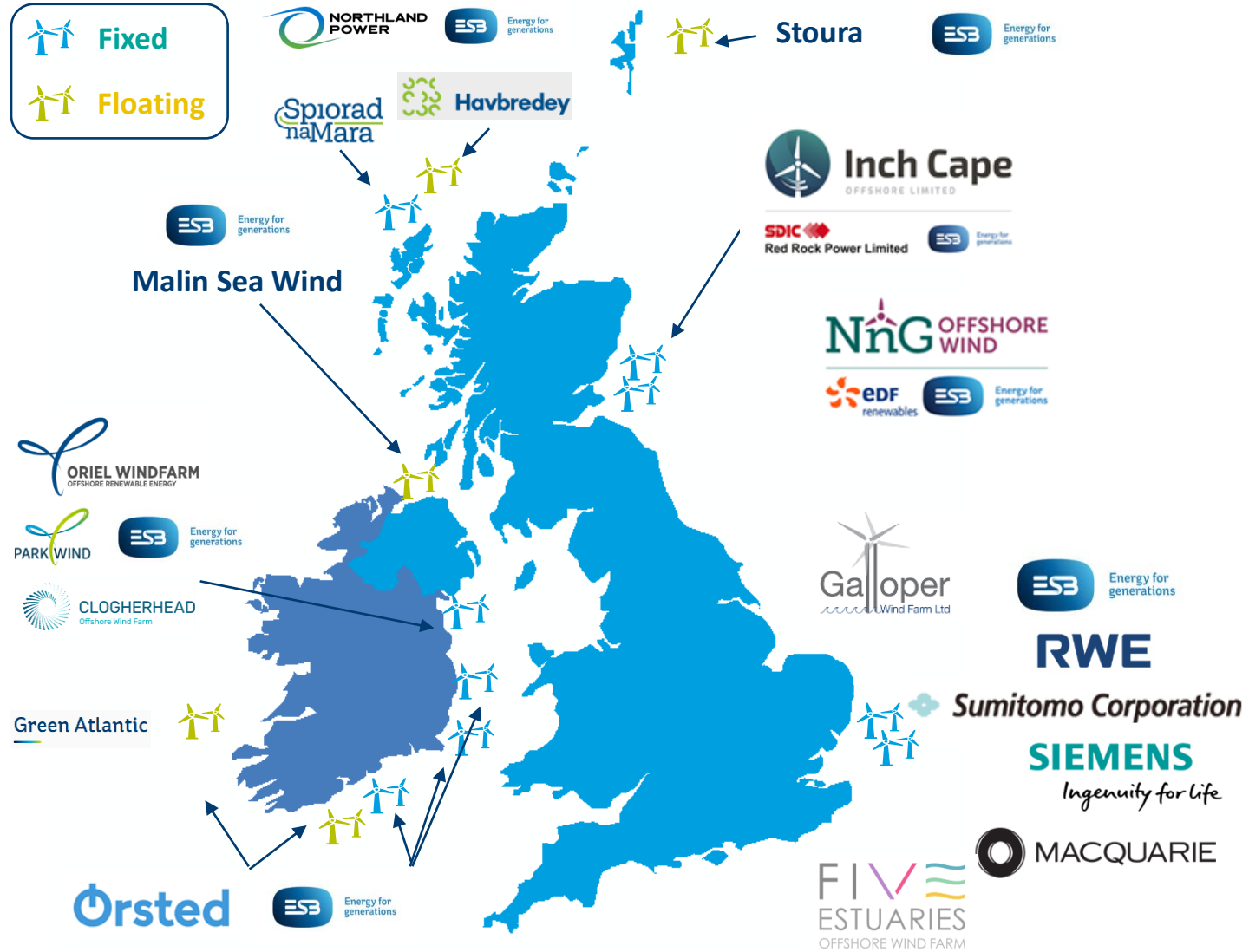
90 Days Hydrogen Storage

**Components of a secure, integrated energy system:
ESB is actively investing in all elements of the Energy Transition to Deliver Net Zero**

ESB OFFSHORE WIND



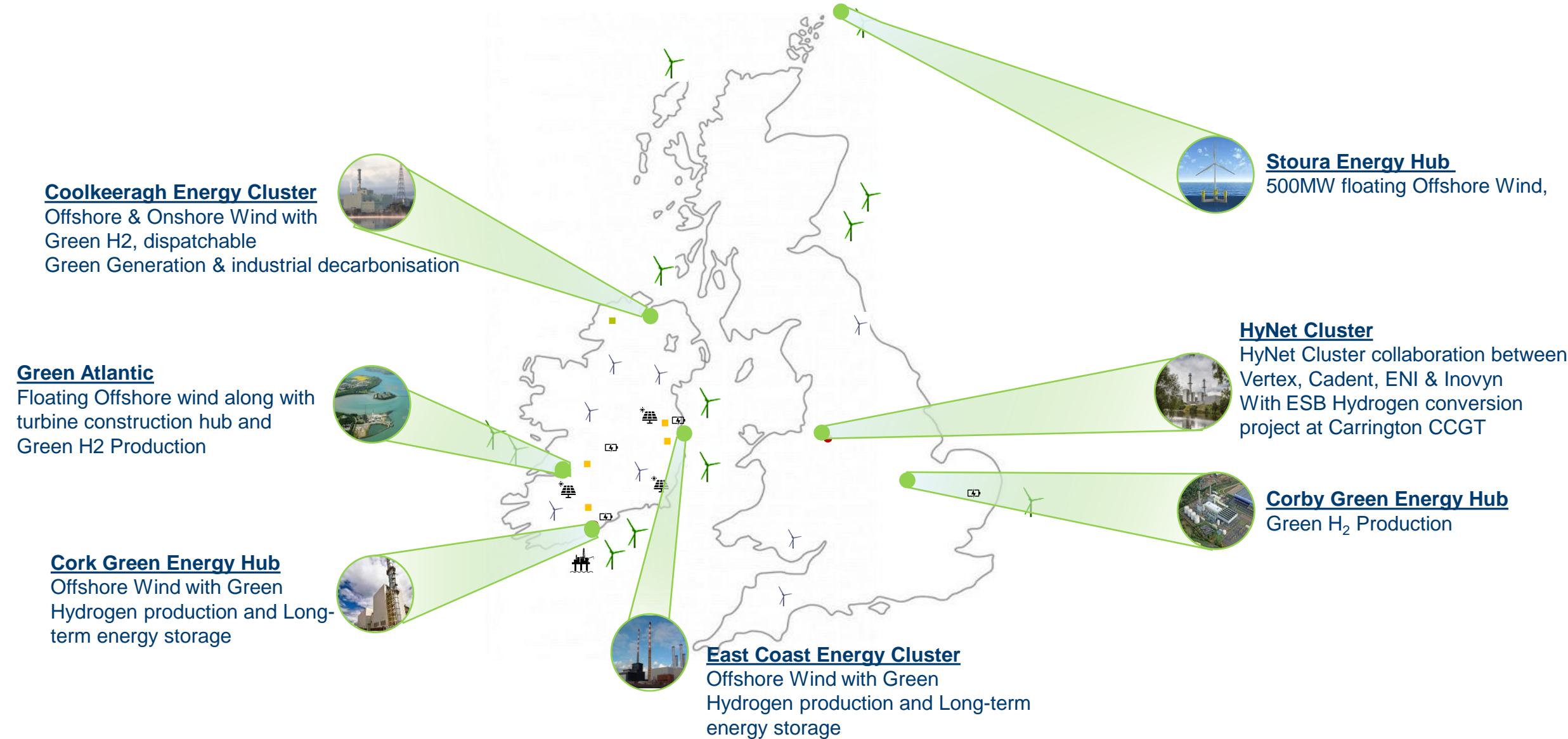
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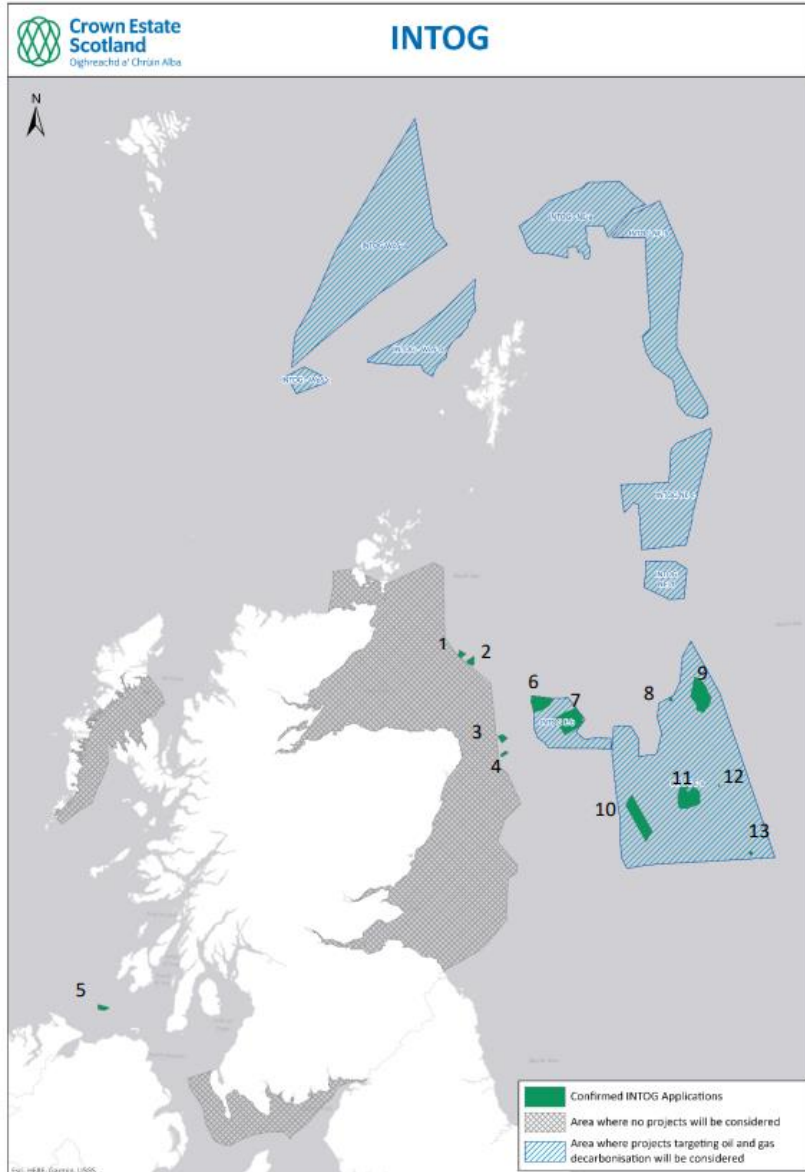


ESB HYDROGEN CLUSTER DEVELOPMENT PROJECTS



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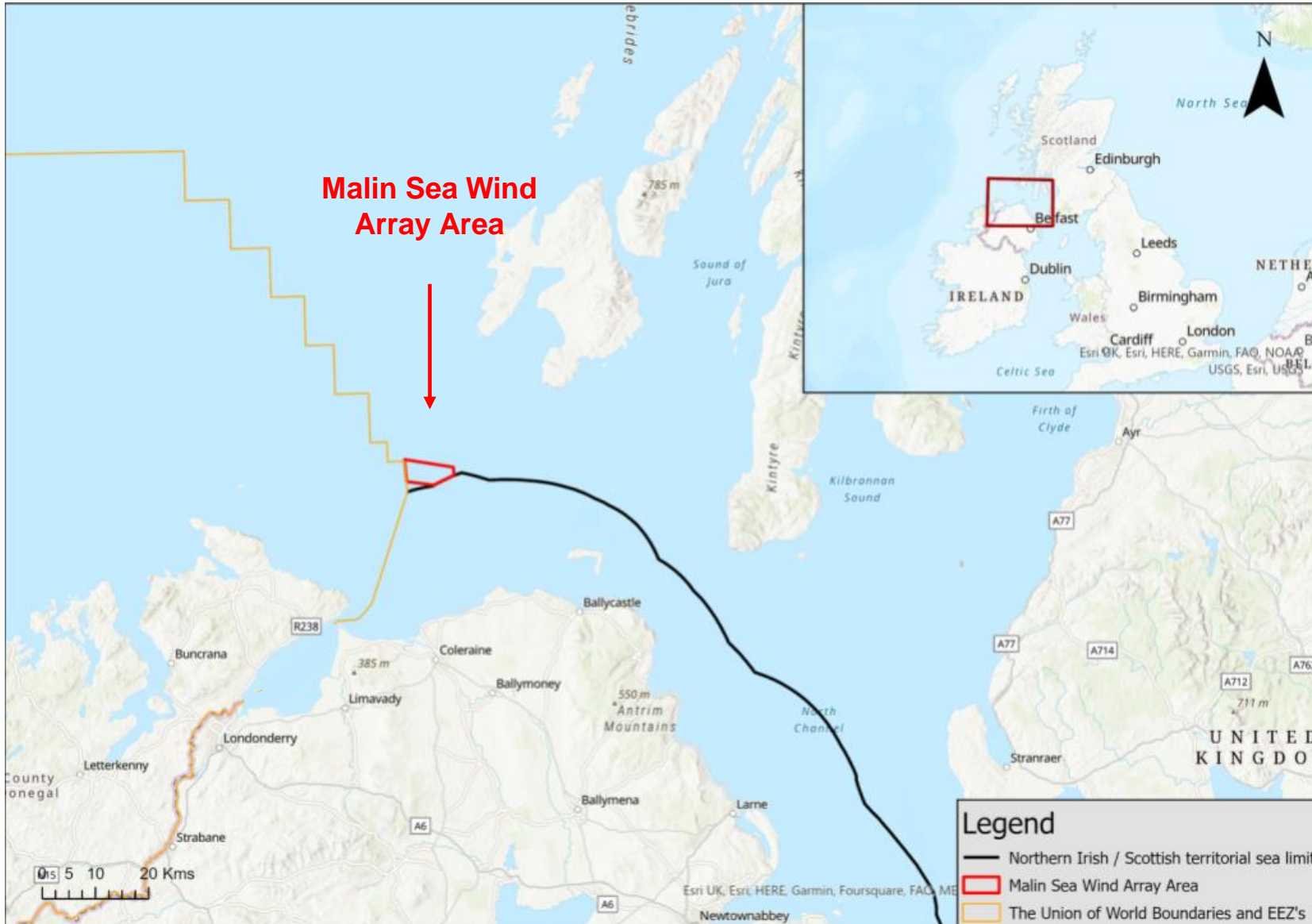
INTOG

- Leasing Round from Crown Estate Scotland
- INnovation and Targeted Oil & Gas
- IN – Demonstrate / Validate innovative approaches to serial manufacture of floating offshore wind
- Unlock staged investment in supply chain & infrastructure
- TOG – Commercial opportunity for floating offshore wind developers and oil & gas operators
- Accelerate skills transition
- Accelerate / enhance investment in offshore transmission and energy storage systems
- Major step towards 2050 Net Zero North Sea Energy System

MALIN SEA WIND ARRAY AREA



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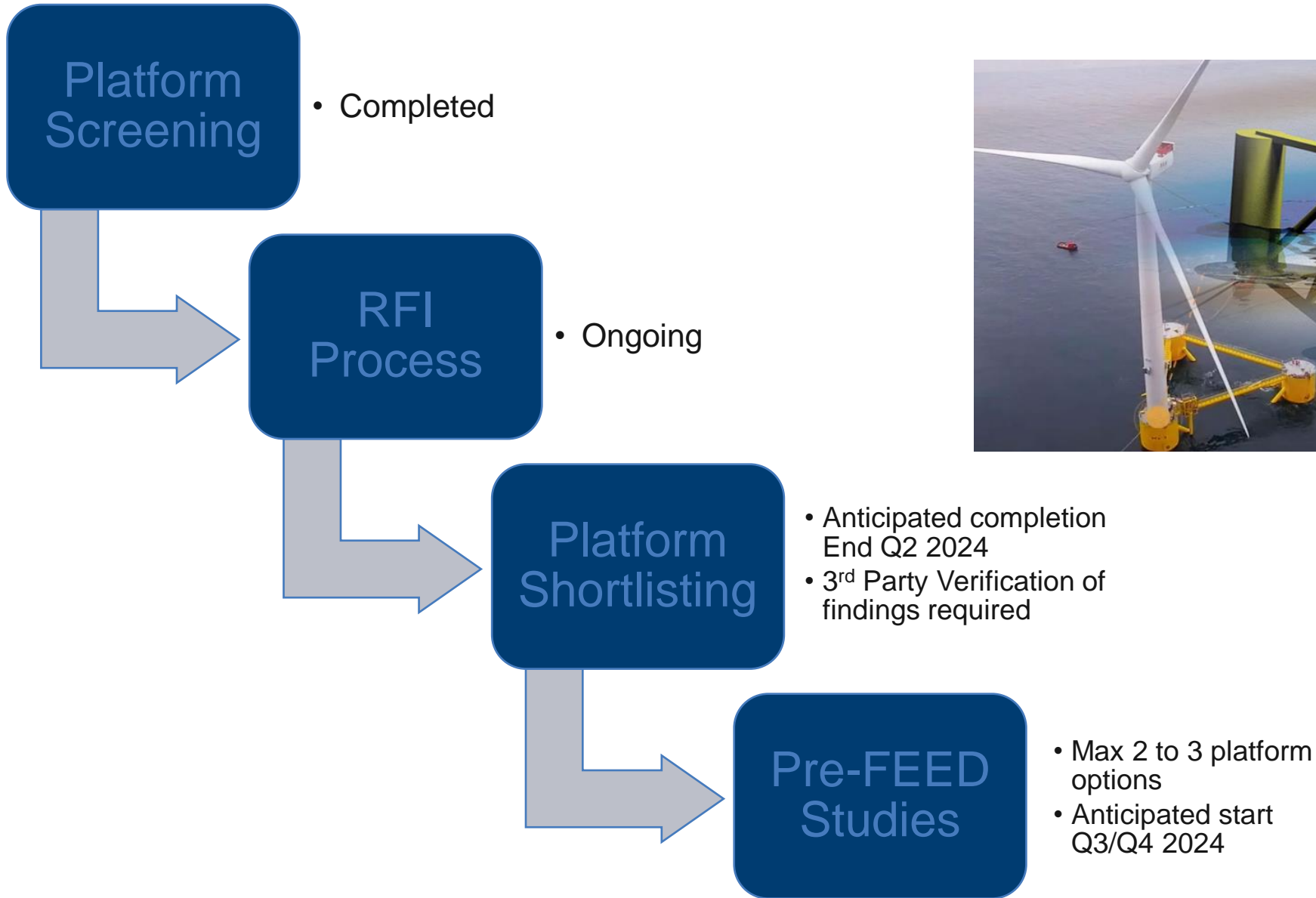
Project Concept

- 100MW Floating Offshore Windfarm
- Innovations (mooring load reduction, efuels)
- Strong strategic fit for ESB
- Early-stage development
- Investigating export to NI
- Stakeholder identification & engagement
- Surveying 2024-2025
- Operational 2031
- Regional benefits, Scotland and NI

PLATFORM SELECTION



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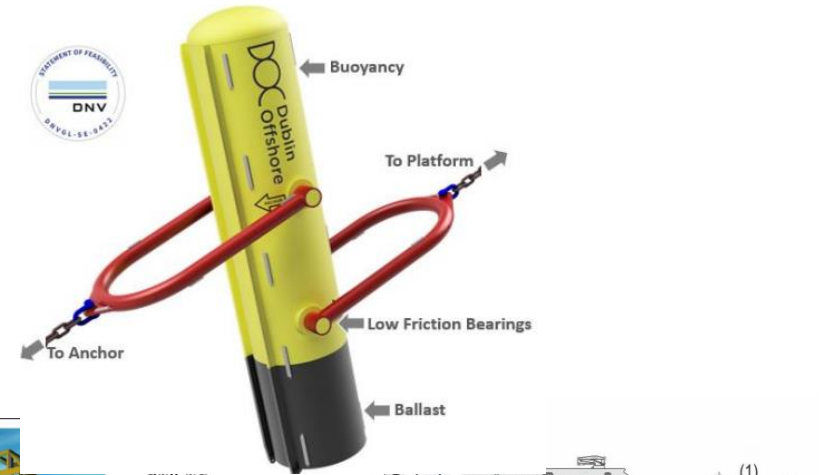
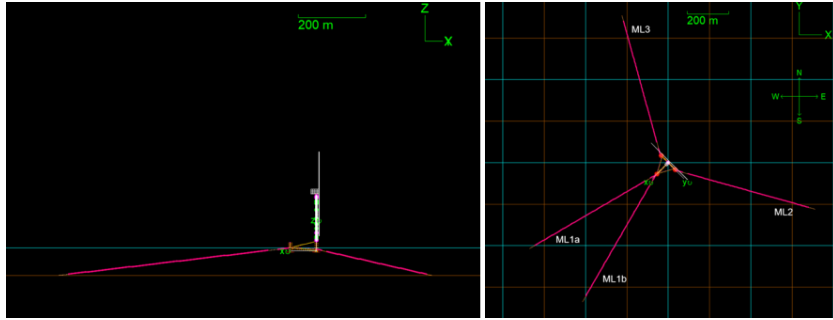
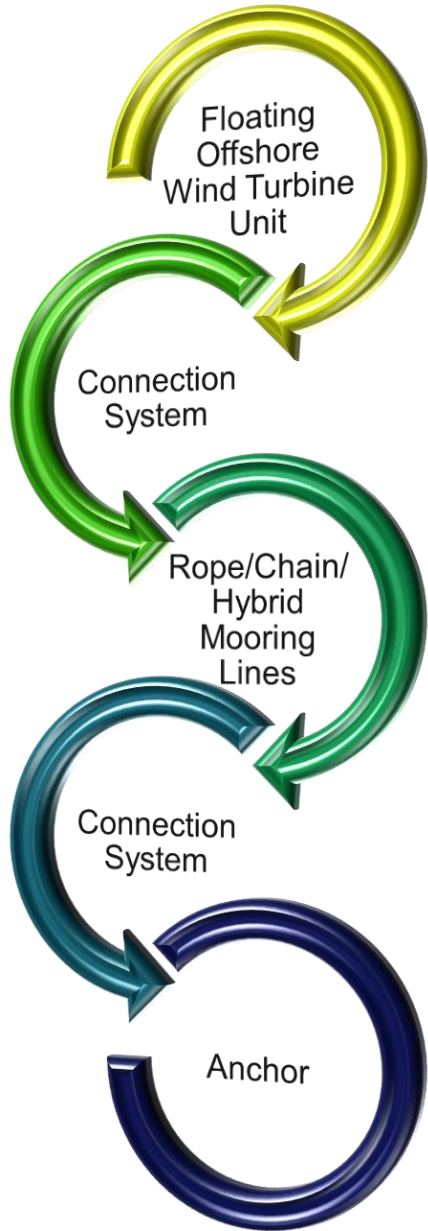


Indicative KPI – Screening Criteria
Fabrication & Assembly
Offshore Installation and Logistics
WTG Installation/Mating
Cable Installation

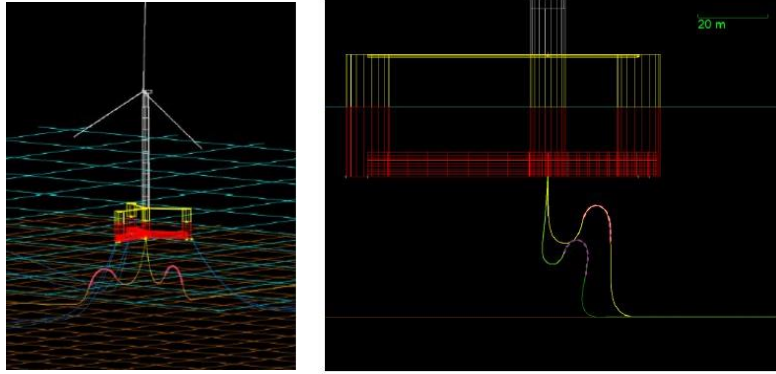
STATION KEEPING SYSTEM ANALYSIS & TECHNOLOGY



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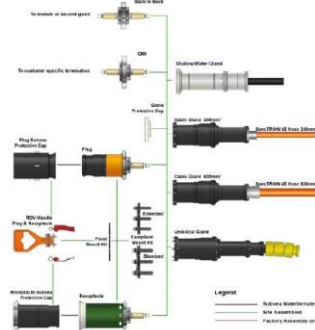
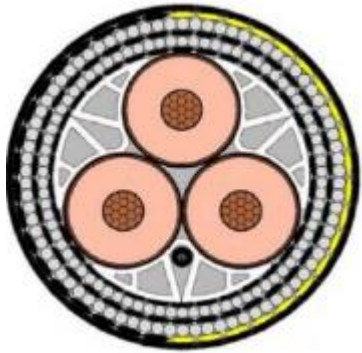


CABLING & ANCILLARY SYSTEMS

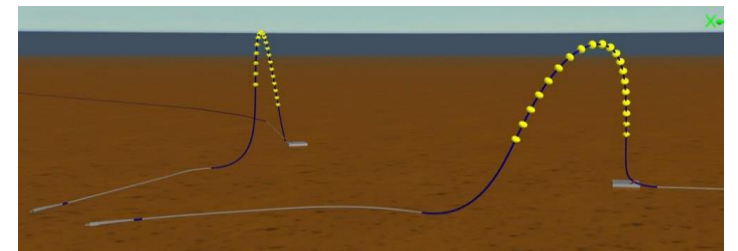
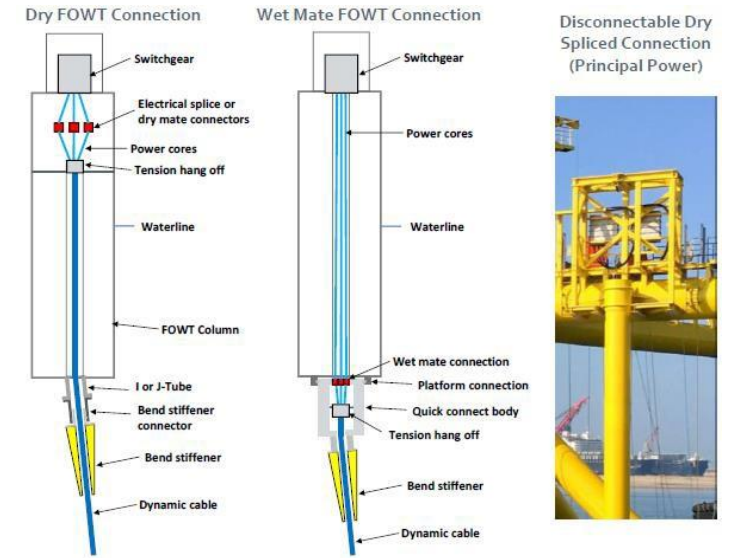


1. Project Requirements being identified – Voltages, Platform impacts, metocean, water depths

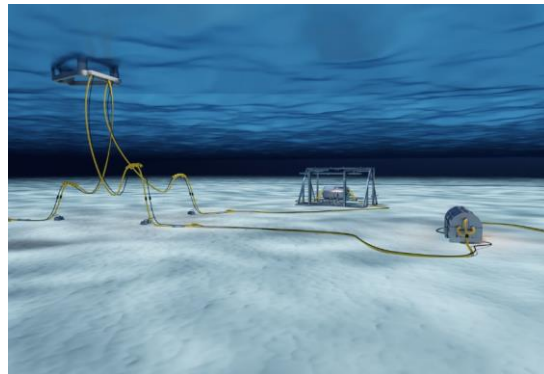
Plug and Play Connector Technology System:



2. State of the Art Review and participation in JIPs ongoing



Consideration towards dis-connection also being investigated

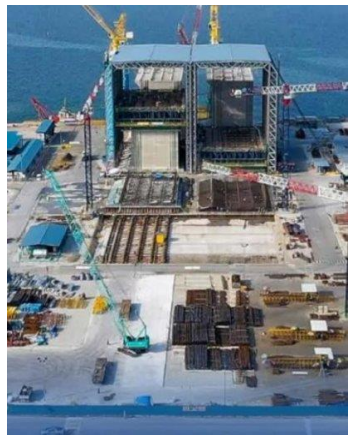
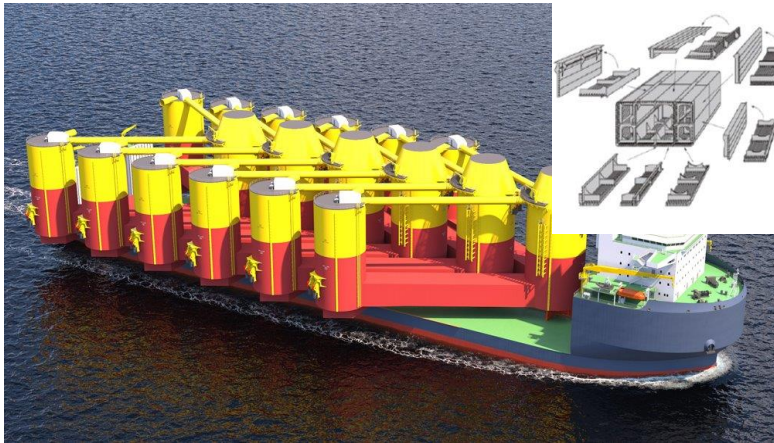


3. ESB considering a number of options including novel solutions

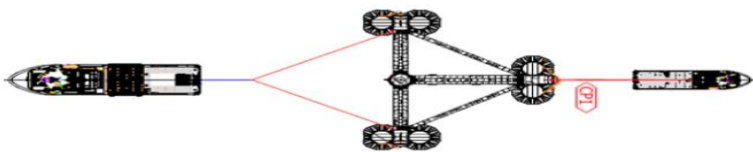
PROJECT EXECUTION PLANNING & SUPPLY CHAIN SCREENING



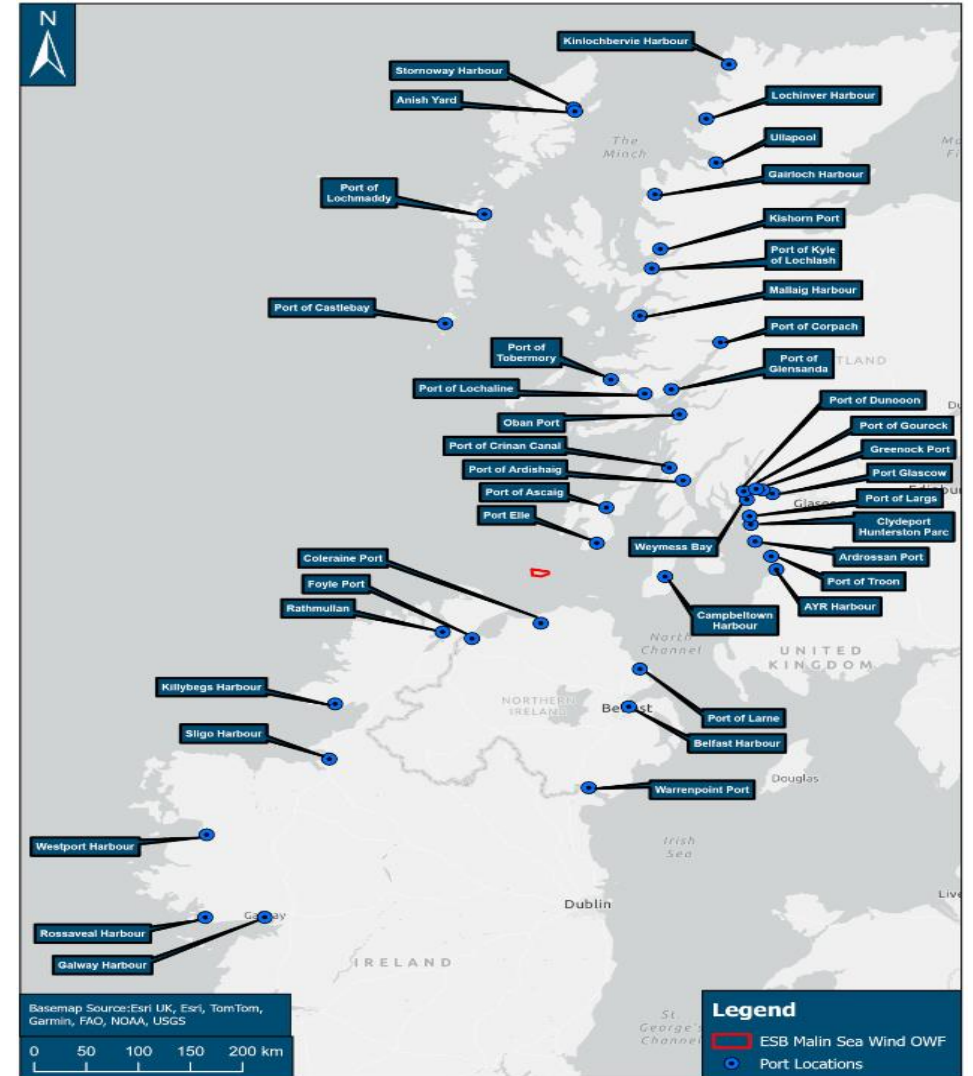
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Regional Supply Chain Knowledge



Construction Methodology

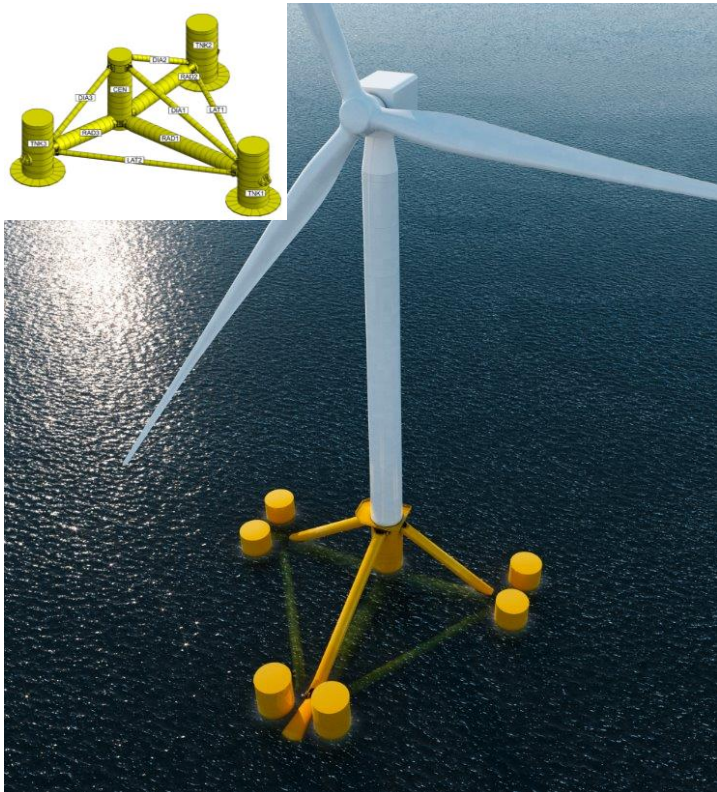


Port Availability and Capability

KNOWLEDGE OF MARKET DEVELOPMENT AND OPPORTUNITIES



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Key developments in supply chain can influence project design – early engagements and opportunity identification required

Thank You

<https://malinseaoffshorewind.com/supplychain>



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