DIT / AEE – Opportunities in the UK Offshore Wind Sector

Overview of ORE Catapult and Floating Offshore Wind Centre of Excellence (FOW CoE)

June 2021 | Ralph Torr

CATAPULT
Offshore Renewable Energy

The Offshore Renewable Energy Catapult

The UK's leading technology innovation and research centre for offshore renewable energy

Mission: to accelerate the creation & growth of UK companies in the offshore renewable energy sector.

- Unique facilities, research & engineering capabilities
- Bringing together innovators, industry and academia
- Accelerating creation and growth of UK companies
- Reducing cost and risk in renewable technologies
- Growing UK economic value
- Enabling the transition to a low carbon economy

The Role of ORE Catapult

OPERATING £1/4BN OF WORLD-LEADING TEST AND DEMONSTRATION FACILITIES IN SUPPORT OF UK INNOVATION

Driving Economic Growth through Innovation

Supporting researchers and innovators throughout the UK

Accelerated Next Generation Technology

- Next generation turbines of 12MW+
- UK research, supply chain growth and IP creation

Energy System Integration

- Establishing UK leadership
- Demonstration facilities
- Hydrogen economy

Floating Offshore Wind

- Accelerating commercialisation
- Developing first commercial scale floating offshore wind farm
- Developing core UK strengths

Smart & Sustainable O&M

- Providing next-gen facilities for development and testing
- Creating decommissioning capability
- Securing innovation and cost understanding / reduction

Floating Offshore Wind Centre of Excellence (FOW CoE)

- Accelerating the commercialisation of Floating Offshore Wind – to deliver net zero and drive economic growth;
- Collaborative programme with industry, stakeholder, academic and supply chain partnerships;
- Developing and delivering a portfolio of collaborative project activity across four workstreams…
    - Technical development;
    - Supply chain and operations;
    - Development and consent;
    - Delivering net zero;
- Working with existing industry programmes, initiatives and activities to augment and accelerate;

https://ore.catapult.org.uk/what-we-do/innovation/fowcoe/

Project Focus – PR5 Dynamic Cabling Systems

- Design Requirements - develop design requirements for dynamic cabling systems in UK, based on a number of representative projects;
- System Approach - includes inter-array cabling, cable protection systems, bend restrictors, buoyancy modules, connections etc;
- State of the Art Review - Complete state of the art review against design requirements to identify relevant technology and gaps;
- Market Projections - Prepare and disseminate market projections to industry and supply chain, stimulate investment in technology development and capacity;
- Technology Development / Qualification Programme in development for FY21/22/23;
- Delivered by ORE Catapult and Peritus International;
- Detailed outcomes for partners only;

Courtesy: Osbit / ORE Catapult

Courtesy: Balmoral Comtec

Courtesy: Rovco

Identical project looking at PR6 Mooring and Anchoring Systems…

Image courtesy of Bruce Anchors

Image courtesy of Bridon-Bekaert

Project Focus – PR19 Strategic Infrastructure and Supply Chain Dev.

- Deployment Scenarios – develop a range of credible deployment scenarios for offshore wind to 2050 – UK and key international markets;
- Assess Current Status - infrastructure and supply chain capability;
- Assess Industry Need – infrastructure and supply chain capability;
- Determine Development Requirements - infrastructure and supply chain capability;
- Develop Business and Investment Models - infrastructure and supply chain capability;
- Develop Specific Recommendations for Development infrastructure and supply chain capability;
- Delivered by ORE Catapult and Arup;
- UK Gov, Scot Gov, Welsh Gov, TCE and CES sitting as "observers" in the project;
- Detailed outcomes for partners only;

Courtesy: Balmoral Comtec

Image courtesy of Bruce Anchors

Image courtesy of: Esbjergportesbjerg.dk

How can the ORE Catapult support your organisation?

Entering the UK market?

- Sector knowledge, partnership opportunities, linking you up with regional development organisations;
- Market information / intelligence;
- Consortium building for collaborative research and development (CR&D) projects;
- Testing and demonstration services;

Exporting from UK to Spain?

- Sector knowledge, partnership opportunities, linking you up with regional development organisations, via DIT, SDI etc;
- Market information / intelligence;
- Consortium building for collaborative research and development (CR&D) projects, via existing CR&D relationships;

Contact us

Email us: info@ore.catapult.org.uk
Visit us: ore.catapult.org.uk

Engage with us:

GLASGOW | BLYTH | LEVENMOUTH | GRIMSBY | ABERDEEN | CORNWALL | LOWESTOFT | PEMBROKESHIRE | CHINA