



PROGRAMME

EMEC's Offshore Wind R&I Programme is driving innovation across the supply chain to deliver offshore wind projects faster, cheaper and at lower risk.

- The programme is designed to embed economic benefits in Scotland while helping companies to tackle specific technical challenges in offshore wind.
- By sponsoring the programme or a targeted innovation call, you can enable the supply chain to develop solutions that directly support your project developments.
- Calls are tailored to your technical, delivery and commercial challenges, or can focus on broader objectives such as skills development, local content and sustainability.







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SPONSORSHIP BENEFITS

ACCELERATE INNOVATION TO REDUCE COSTS AND BOOST PERFORMANCE

CONSTRUCTIVE ENGAGEMENT WITH SUPPLY CHAIN

Accelerating innovation in key challenge areas through incremental improvements and breakthrough technologies and approaches can drive down costs and boost performance across the windfarm's lifecycle. From turbines, foundations, transportation and installation, to operations, maintenance, life extension and decommissioning, this approach strengthens regional supply chains while satisfying supply chain development statement (SCDS) commitments to Crown Estate Scotland.

Innovation calls target supply chain solutions not yet commercially available. Launched ahead of windfarm procurement, they fast-track promising ideas that might otherwise be overlooked in standard processes. For windfarm developers, this eases procurement pressure by providing a supported route for suppliers not ready for your pipeline, while accelerating supply chain readiness and ensuring high-potential technologies are prepared for future projects.







CHALLENGE AREAS

A. UNDERSTANDING SITE AND METOCEAN



Seabed, sub-bottom and strata



Weather forecasting and live metocean measurements



Fish, mammals, birds and benthic



Long-term effects of climate change

B. WIND TURBINE GENERATORS AND LAYOUT



Optimised layout and control strategies

Redundancy, fault tolerance and ride-through

Condition monitoring and structural health monitoring

Blade treatments for performance and longevity

C. FOUNDATIONS, PILES AND SECONDARY STEEL



Novel design(s) for reduced mass

Serial production and local capability



Condition monitoring and structural health monitoring



Digital twins for fatigue, life and life extension

D. CABLES, OFFSHORE SUBSTATION PLATFORMS AND TRANSMISSION



Low fault cable-lay in tough conditions



Proving reliability of **HVAC** equipment



Unmanned fully automated offshore substation platforms



Advanced downcable analytics

DELIVER COMMITMENTS ON LOCAL CONTENT, SKILLS AND SUSTAINABILITY

ACCESS WORLD-LEADING EXPERTISE AND EXPOSURE

Project developers entering Crown Estate Scotland leases and similar agreements often make specific commitments to collaboration, local content, supply chain, skills development and environmental sustainability. By investing in the R&I Programme, you can shape competitions to meet these requirements and provide evidence of delivery. Targeted competitions also help build local, sustainable solutions that strengthen supply chains and create long-term benefits for future projects.

Based on 20+ years of operations, EMEC has significant experience across the innovation and funding competition space, and our technical expertise spans marine renewables, power-to-X (P2X) and decarbonisation. You'll work closely with our team who facilitate the entire process from writing competition scopes and promoting calls to supporting applicant proposals and project delivery. Sponsors gain visibility across supply chains, with branding featured on the programme website, marketing materials and communications.



E. TRANSPORTATION AND INSTALLATION





Design for short weather window installation



Construction flow, logistics and project management



Techniques for large components



Removing/separating people from risk

F. OPERATIONS AND MAINTENANCE (O&M), VESSEL DESIGN AND SUPPLY



Ξ

Automation, robotics and removing the human



SOV design for turbine access



Blade maintenance in tough conditions



Zero emission O&M vessels and equipment

G. LIFE EXTENSION, RE-POWERING AND DECOMMISSIONING





Understanding health for life extension decisionmaking



New approaches for best-practice decommissioning



New equipment for cable extraction, recovery & recycling



Watching brief for early re-powering and site lease extension

H. CROSS-CUTTING AND OUTSIDE-THE-BOX THINKING





Sustainable materials and recyclability designed-in from start



Machine learning and artificial intelligence for automated monitoring and diagnosis



Remote sensing and operations, robotics and 'removing the human'



Local capabilities: education, skills and human resources

FUNDED PROJECTS

The R&I Programme is gaining strong industry recognition and supply chain engagement. Our first innovation call drew 29 applications from companies spanning Orkney to Amsterdam and even California. Three innovative companies are being funded through the first innovation call.





TRIOS Renewables is developing a solution to embed spatial metocean intelligence into offshore wind operational expenditure (OpEx) models, narrowing the gap between the oceanography world and the OpEx world. The software will help de-risk and improve bankable financial performance of projects prior to a final investment decision (FID).



Seaview Sensing aims to improve wave measurement accuracy and provide wind mapping to ensure 24/7 surface current, wave and wind data using a high-frequency radar system. The data can be used to provide real-time metocean information and improve forecasting by identifying weather windows, thus reducing the risk presented to people, cargo and vessels.



Next Ocean has developed a novel Wave Predictor tool which predicts waves and ship motions in real time for the upcoming few minutes. This decision support tool provides predictions at a level of detail of individual waves and motion crests, allowing the crew to pick calmer moments to execute the most critical phase of offshore operations.

SPONSORSHIP OPTIONS

Sponsorship of the R&I Programme is open to leading companies and organisations from across the offshore wind sector. Indicative levels of sponsorship are shown in the table below.

There are four levels of sponsorship:	Platinum Programme sponsor	Gold Call sponsor	Silver Call sponsor	Bronze Collaborative (or team) sponsor
Investment	£1 million +	£600 k	£200 k	ТВС
Duration	3 years +	2 years	1 year	1 year
% for innovation calls	90%	87.5%	85%	ТВС
% for programme management	10%	12.5%	15%	ТВС
Example innovation calls	5 innovation calls	3 innovation calls	1 innovationcall	1 innovation call
(fewer calls increases funds available for each call)	£180,000 per call	£170,000 per call	£160,000 per call	f dependent on partnership, level of investment and/or in-kind contribution

GET IN TOUCH TO DISCUSS BECOMING A SPONSOR



With EMEC's experienced team managing each stage, sponsors can quickly launch targeted competitions and trust that every call reaches the right supply chains.

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