

# LAUNCH ACADEMY NORTH EAST

## CLEANTECH OFFSHORE RENEWABLES ACCELERATOR



[ORE.CATAPULT.ORG.UK/LAUNCHACADEMY](http://ORE.CATAPULT.ORG.UK/LAUNCHACADEMY)

**CATAPULT**  
Offshore Renewable Energy

**LAUNCH  
ACADEMY**  
NORTH EAST



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# LAUNCH ACADEMY

## North East Cleantech Offshore Renewables Accelerator

**ORE Catapult's purpose is to accelerate the success of UK companies in the renewable energy sector, driving clean economic growth. The UK has the world's largest installed capacity of offshore renewables and world-leading academic research expertise and has a lead in many of the technology areas needed to improve operations, develop new turbines, and bring forward disruptive innovations required to unlock growth.**

The ultimate potential for offshore renewables is truly enormous. The UK has sufficient natural resources of offshore wind, wave, and tide to provide all of our energy, including transport and heating, with plenty to spare for export to Europe. The world will build hundreds of billions of pounds worth of offshore wind farms in the coming decades. By 2020, 10GW will be installed in the UK, with more than 10GW across the rest of Europe and 5GW in China. By 2030, we may see up to 30GW in UK waters, more than 20GW in the US, and global investment of more than £250bn.

Offshore renewables are poised to provide much of the affordable and secure energy needed to power the UK economy. Combined with substantial export potential, they represent the UK's largest clean growth opportunity. To ensure UK industry is competitive and can deliver the full potential for jobs, exports and economic growth that the sector offers, innovation to improve generating plant and operational performance is essential. Accelerated innovation is also key to sustaining and improving upon the impressive drop in the cost of offshore wind energy – a breakthrough that can revolutionise the UK's drive for clean transport and heating.

### Why the North East of England?

The North East of England's subsea and offshore technology excellence is a story of world-class engineering and manufacturing, of bold industry pioneers and of a bright future based on innovation. Drawing on a proud history of providing innovative solutions for industry in extreme and hazardous conditions, it is using technological advancements to enable present day and future operations to move into ever deeper and more challenging waters. The North East is world leading in offshore and subsea technology:

- // Over 50 companies with a combined turnover of £1.5bn
- // A high skilled workforce, employing over 15,000 people in the sector

Priority Areas of technology

Whilst there is a dominance of global players in the UK offshore wind market, the UK is already home to the biggest and best of them, providing thousands of jobs in the development, construction and operation of offshore windfarms. UK content is already high – approximately 50% – and is growing.

- 1

Digitisation & Application of Digital Twins

Development of digital clone technologies to improve understanding of offshore asset performance and operations
- 2

Next Generation Predictive Maintenance

Next generation sensor technology and algorithms analysing SCADA data to optimise performance of offshore assets
- 3

Smart O&M Robotics and AI

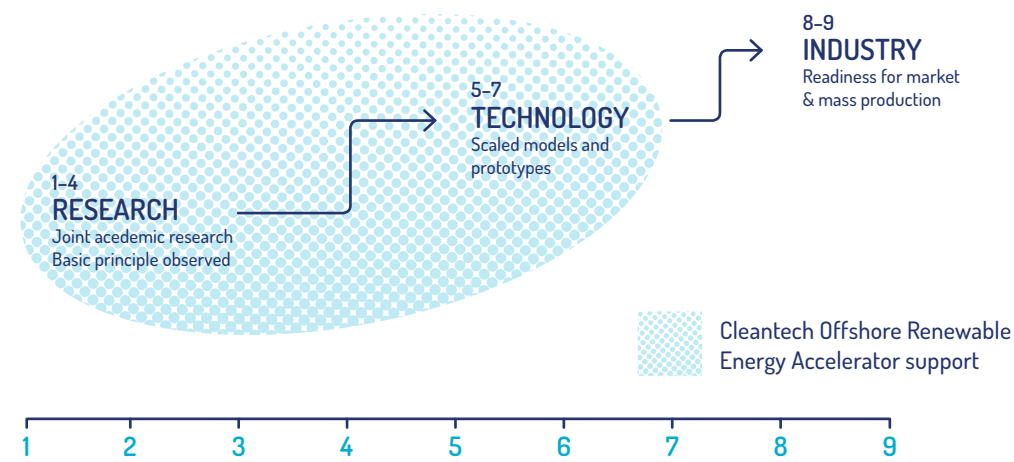
Novel robotic technologies for subsea inspection, survey and maintenance
- 4

Energy Systems Management for Offshore

Optimising energy management from offshore assets including novel storage and transmission technologies

Supporting the development of next generation concepts in these areas will be critical as offshore wind moves further offshore. A good example of this is the Dogger Bank which will be the world's largest windfarm and the furthest distance from shore at over 125km+ (over 80 miles).

Technology Readiness Levels (TRLs)



CONCEPT AND FUNDING

Cleantech Offshore Renewables Accelerator

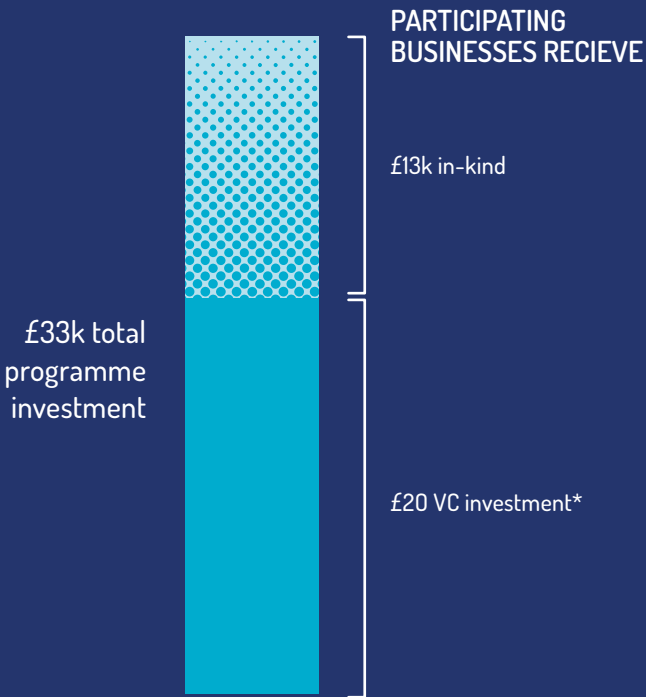
The Cleantech offshore renewables accelerator programme is designed to accelerate North East-based start-ups towards commercial, technology and investment readiness in the rapidly emerging offshore renewables sector.

By participating in the programme, businesses will have the opportunity to progress their products and services further up the Technology Readiness Level (TRL) scale, as well as present to relevant industry investors and mentors to optimise their commercial offering. A formal selection process will ensure businesses in the TRL 4-6 range are selected with the most promising technology and business case propositions.

Benefits of participating in the Cleantech Offshore Renewables Accelerator

- // Accelerate the development of technology and innovation
- // Get leading industry support
- // Early stage VC investment of £20k with potential for further investment support
- // Access major end users of offshore wind farm technology
- // Potential to join the national, 9 month Launch Academy programme following completion of this accelerator

Programme Funding Structure

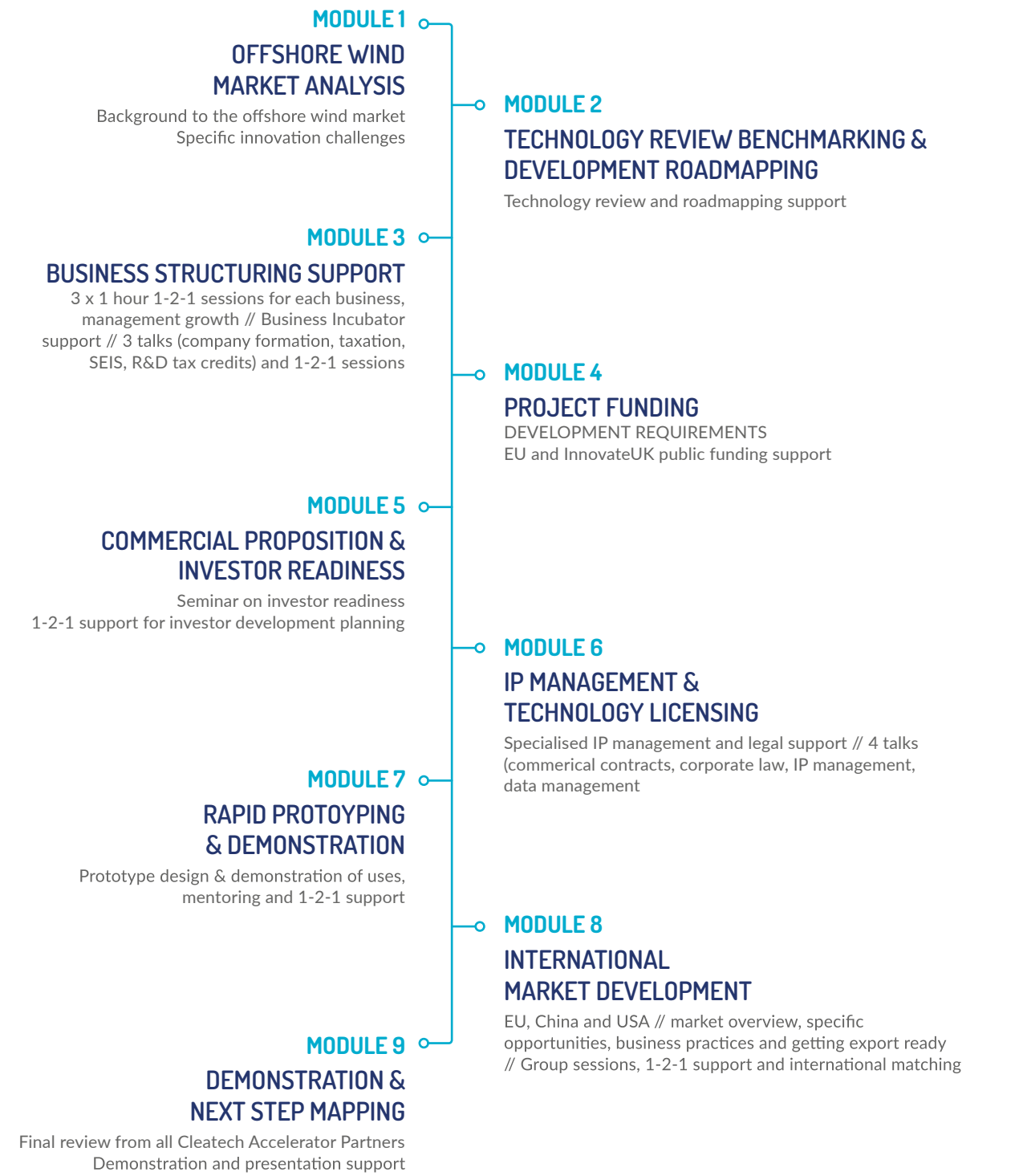


\* including £4.5k incubator and management fees  
(funding also covers the programme fees, this comes directly from the VC investment)



12 Week Accelerator Programme

The 12-week Cleantech Accelerator will be delivered through expert contributions from each partner across the modules outlined below. The programme will conclude with a demonstration day to potential investors and end-users. The programme will be hosted at the TUS Park Barclays Eagle Lab in Newcastle city centre.



Application Process

Organisations are invited to apply\* before the application deadline of 13th December 2019. All applications must be completed through the F6S portal available from the following link:

[www.f6s.com/orecatapultlaunchacademy-northeast](http://www.f6s.com/orecatapultlaunchacademy-northeast)

There will be an application review period and selection panel process with industrial partners. Successful applicants will be contacted in December to commence the programme, which will run from late January - April 2020.

For any additional queries please contact:

Ravneet Kaur **Innovation Manager**  
ravneet.kaur@ore.catapult.org.uk

James Battensby **Head of Research Business Development**  
james.battensby@ore.catapult.org.uk

*\*Applicants to the Cleantech Accelerator must meet the official definition of a Small to Medium Enterprise (SME). To be eligible for the Cleantech Accelerator, applicants must have a registered business address in the North East of England (which can either be existing or incorporated prior to the programme start date).*

Introducing the project partners

