

How Research Institutions Can Engage with Offshore Wind Companies

John Sturman BSc (Hons) MSc CSci MIMarEST CMarSci
Chairman, Offshore Renewables Group, IMarEST
Principal Advisor, Offshore Renewables, RPS



sturmanj@rpsgroup.com



Industry Background

- Offshore wind farm development is undertaken across Europe by already established companies, who are mostly electricity utilities.
- Most wind farm developers are active across several national markets.
- The amount of learning required to develop offshore wind farms makes it extremely unlikely new entrants will appear.
- Due to the large array of services required, developers operate multi contract development.
- Relationships with sub-contractors are already established.

Current Engagement with Developers

- The research organisations that have successfully engaged with developers have mostly done so through setting up spin off specialist consultancy services e.g. Sea Mammal Research Unit (SMRU), University of St Andrews; CREST, Loughborough University.
- Most research services are now commissioned to assist the planning and consenting phases e.g. Assisting the Environmental Impact Assessment (required under EU legislation)
- Developers prefer engaging with consultancy companies that carry professional indemnity rather than academic institutions.
- Some developers fund research institutions directly, to work on specific offshore wind issues e.g. floating foundation design, piling noise propagation, wind modelling.

Successful Engagement Characteristics

- Research institutes must adapt to a commercial environment. In particular, delivery on time, customer focus, regular reporting, output targeted at clients requirements. Understanding the clients needs is key and is the most common stumbling block for academic/research institutions.
- Production of reports on a commercial level – the aim is NOT academic publication
- Confidentiality – Developers commissioning work do not normally allow general publication. Research institutes must move away from work focused purely on publication.
- Targeting niche services at a competitive price. Research organisations cannot compete with the delivery of services from a large professional consultancy company, where, in particular, significant project management experience exists. Developers will not risk handing large pieces of work to non professional organisations.

Market Entry

- Developers have a preference to utilise existing relationships with contractors who have proven deliverability.
- Certain areas of development are difficult for non-local contractors to satisfy and offer a good opportunity for local research institutions:
 - Environmental surveys (birds/mammals/fish/geotech/geophys/benthic ecology)
 - Existing offshore databases will be wanted. Research institutions that hold these are in an ideal position to take advantage of the opportunity.
- Partnership with a large consultancy main contractor with existing developer relationships and track record (this also removes the burden of project management and client relationship management, which are resources often lacking in research institutions).
- Targeted research is most often funded by national governments that are keen to develop an offshore wind industry e.g. Offshore Wind Accelerator, Carbon Trust. Research institutions usually submit competitive bids for the funding in collaboration with an industry partner.