



— HELPING DEALS GO SMOOTHLY IN FLOATING OFFSHORE WIND

Do you plan to invest in an offshore wind farm? Is it a floating offshore wind farm? How would you approach the investment and what questions should you ask? Enter the **Deal Advisory service** – technical and commercial due diligence specialists who help clients understand and assess investment risks.

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In this article, we speak to **Jonathan Yates** and **Bora Demiralan**, who advise international investors, lenders and developers across a range of infrastructure types. They have undertaken various onshore and offshore renewables transactions, including associated infrastructure such as interconnectors, battery storage and port infrastructure transactions, including **bp's recent acquisition of a majority share of Deep Wind Offshore's project portfolio** in South Korea.

Throughout their careers, they've advised on dozens of successful large-scale investments for the energy sector, those related to energy transition, and renewables including floating wind. Find out about some of the investment considerations for this industry as Jonathan and Bora give their view on the market outlook for floating offshore wind.

How does the Deal Advisory team support floating offshore wind projects?

As an investor or developer, the support you'll need depends on the development stage of your project: from initial leasing-round strategy or business case to an operational/brownfield M&A acquisition. Regardless of the project stage, the Deal Advisory team's job is to "ask the right questions".

For example, in a leasing-bid process (such as RPS supported in recent New York Bight bidding rounds), the Deal Advisory team would advise on lifetime or Levelized Cost of Energy (LCOE), linked to site conditions including foundation types, as well as competitor analysis and more. As a greenfield project develops, we would consider site constraints, grid connectivity and how commercially attractive the project is. There is a heavy emphasis on the link between technical and commercial aspects.

For projects that are further developed, there are different questions to ask. For an asset that has operated for several years, we would consider operational performance metrics such as wind yield, availability, maintenance regimes, expected remaining lifespan, failure rates, operational problems, cost of maintenance and any decommissioning liabilities. We might also look at repowering – replacing existing turbines with the latest technology – and **residual value** at the end of the wind farm's life.

The operational costs for floating wind are liable to be higher than for fixed. Sites' increased distance from the shore raises maintenance costs, whilst weather and sea conditions can limit windows for maintenance. Numerous other constraints would need to be considered in the planning and development stage for floating offshore wind projects, such as shipping routes, the presence of fibre optic cables, power transmission cables and underwater structures.

The type of floating wind farm you plan is another technical and commercial decision. On one recent RPS project, the deep-water site would have made floating wind the obvious choice, but the still-evolving substation technology wasn't felt to be ready. In this case, a hybrid wind farm is planned – a scenario that could repeat in other nearshore-shelf sites (for example off California and parts of Asia).

Who's investing in floating offshore wind projects?

Jonathan explains that his clients are sophisticated investors, who are well-versed in working with a range of technologies. Despite the relative newness of the industry, floating offshore wind's range of backers includes those who are already more comfortable taking some level of project development risk, providing the appropriate commercial arrangements are in place. This is an important consideration for public agencies who are procuring offshore wind projects, as the right balance of risk allocation will ultimately lead to the best value for rate payers.

Ongoing growth in confidence means the outlook is positive for floating wind. Jonathan says, "Although the industry talks about the challenges of moving to floating projects, what we're actually witnessing is a continuation of technological development in the offshore wind sector in general". Fixed foundation offshore wind developed from small turbines to business cases dependent on individual turbines with >15MW generating capacity, and the industry is now flanked by supportive government goals and strategies. Over the years, there have been big changes in technology and how projects are developed.

“Once upon a time, investors in offshore wind projects would wait until assets were operational. We now see investors getting involved in offshore wind projects much earlier, in the initial stages. This trend is very likely to continue with the move towards floating offshore wind projects – and indeed, the debt ‘premium’ attached to the technologies is already seen to be 25-55 bps, so following a favourable trend.”

Understanding investment risk in floating offshore wind

So, what types of investment risk could projects encounter? These fall under various headings, including technical, regulatory and commercial.

Technical

Although there are no commercial-scale operating floating offshore wind sites, the aspects of planning, permitting, environmental and grid constraints play significant roles in technical due diligence.

Floating wind will use relatively novel technologies such as dynamic array cables, floating substations, and, potentially, even underwater substations in the future. As the technology develops, there are likely to be higher costs initially, but as Bora points out, “cost is only one side of the equation”. Because of the higher wind yield further offshore, LCOE may be comparable with projects nearer to the shore.

For those investors who are used to floating oil and gas projects, there are useful lessons to be learned but the team caution against making direct comparisons. For example, oil and gas structures use more mechanical parts, while a floating substation has more electronic and electrical parts – floating wind and floating oil and gas won’t operate in the same way.

Regulatory

To help the technology transition, developers are looking to governments to provide specific policies, regulations, incentives or subsidies. They’ll lean towards markets with good renewables track records, and towards governments and regulatory environments that are stable and committed to the floating wind industry. The UK is one example, with consistent leasing rounds and procurement; the US and Korea look likely to follow suit. To increase confidence in their long-term strategic direction, governments need to articulate their long-term vision effectively, covering factors like supply chain capability, ports, training and the availability of areas for development. After all, these project types represent global competition for limited resources and manufacturing capability, plus extra pressure on the supply chain.

The regulatory requirement for decommissioning is another aspect that must be included in any project viability assessment. There are some regional variations: where one example requires the eventual removal and decommissioning of all offshore structures, another leaves

certain structures in situ. The size of the decommissioning budget itself will depend on your proposed decommissioning methodology and the specific local requirements. Floating turbines, substations and dynamic cables would all require detailed consideration.

Commercial

Infrastructure projects need well-defined commercial structures, designed to suit the entire life of the asset(s).

From the early stages of a project, one of the changes that the Deal Advisory team is seeing is around proprietary operational data. This is becoming an important issue for floating wind, where there is a more progressive attitude than for other technologies (although this varies by region). Currently, not all data is shared in the public domain or through working groups. This means some developers will enjoy a unique insight into the technology and its long-term performance, whilst others cannot easily benefit from this developing industry knowledge. Although it's perfectly fair to protect intellectual property and an investor's own commercial position, some organisations are taking a different tack, sharing as much data as possible to support broader industry development. This is happening in [the Celtic Sea](#) and [off the Netherlands](#). For public agencies who are procuring these projects, the definition of expectations around commercial data sharing are very important considerations.

Investors also want to know that there will be returns, even if energy prices fall. Power prices remain highly correlated to the fluctuating price of oil and gas, so many renewable-energy projects are underpinned with PPAs (Power Purchase Agreements), renewable energy certificates or tax credits. These mechanisms provide some insulation against price uncertainty, while the actual returns investors receive will depend on the commercial arrangements put in place for your project.

Currently, there is a risk that inflationary pressures in the development stage (devex, capex) are eroding the expected returns for projects that have fixed \$/MWh revenues. Our Deal Advisory team have experience in quantifying and helping to mitigate these risks through commercial contract structures or procurement approaches.

The RPS approach

Trust is particularly important to clients in this sector, as are previous floating and fixed offshore wind projects. RPS' decades of offshore experience and our breadth of expertise gives our Global Deal Advisory team a unique perspective: we support developers from the early stages, including [Floating LiDAR studies](#) and [environmental impact assessments \(EIA\)](#).

Once projects are armed with the necessary environmental information, digging more deeply into technical and commercial due diligence is a natural extension – but we're also able to call on technical expertise from across RPS.

Bora concludes, “This is an exciting time for floating offshore wind! We’re helping clients make informed investment decisions on some ground-breaking projects. For some, these are material contributions to their net-zero targets. We are looking forward to seeing investors become more comfortable with the risks and how the industry develops.”

If you have questions about Deal Advisory services, please contact [Jonathan Yates](#) or [Bora Demiralan](#).

Read more about us: [RPS’ Deal Advisory team celebrates number 1 ranking in Asia Pacific](#)