



Offshore Wind Breakfast Briefing

Key takeouts

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Pinsent Masons



Market insight

Market poised for record year



In a packed conference room at Pinsent Masons' London office last week, inspiratia brought together a panel of European offshore wind heavyweights to discuss the sector's latest financing developments, recent pathfinder deals and potential expansion into new geographies

As Europe's offshore wind industry heads down a pathway towards full maturity, the sector is facing a number of important financial challenges. The sheer number of projects in the pipeline – in the UK, Germany, Netherlands, Belgium, Denmark and France – means all sorts of capital will be needed to meet the required investment levels.

This represents an opportunity for new investors and lenders, many of whom are increasingly seeing offshore wind as the last large-scale greenfield opportunity in European renewables. The industry's seasoned players, both equity and debt, will play crucial roles in helping these new entrants fully understand the risks.

But the increasing appetite for offshore wind comes at a time of great change. With Europe moving away from feed-in tariffs towards auction-style subsidy regimes, much emphasis has been placed on bringing costs in the sector down.

Figure 1 suggests this is already happening, with some of this year's project financed deals expected to come in as low as €3.3 million (£2.5m US\$3.7m) per MW – compared to the €6 million (£4.6m US\$6.7m) per MW seen on Gemini in 2014.

Efficiencies can be made across the supply chain, with cost savings to be had in the manufacturing and installation of

cables, turbines and foundations. Equally as important is the cost of funding.

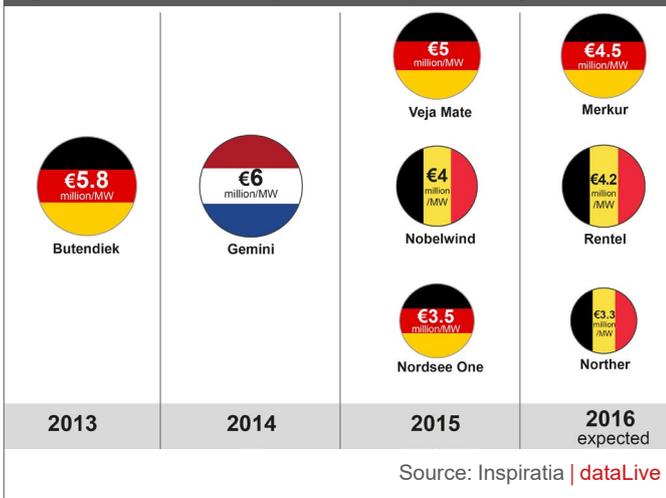
"In our part of the business, we focus on the cost of capital itself," said Kunal Patel, head of structured solutions at **DONG Energy**, which has an offshore wind cost target of €100 (£76 US\$111) per MWh by 2020.

"Given it's such a capital intensive industry, bringing down the WACC of a project has a significant impact on the overall cost of electricity."

This is one aspect projects in the UK will have to contend with. As part of a revamped contracts for difference (CfD) regime, offshore wind will be competing for a pot of £730 million (£959.2m US\$1.1bn) later this year – but only if it can show costs are coming down. As such, support for the next wave of projects will be capped at £105 (€138 US\$153) per MWh, according to 2011/12 prices.

Nick Gardiner, who is responsible for the **Green Investment Bank's (GIB)** direct investment activities in offshore wind, commented that a number of current projects will be able to get done at this price. The difficulty, he said, will be the trajectory down to £85 (€112 US\$124) per MWh – the cap for projects commissioning in 2026.

Figure 1: Offshore wind cost-per-MW – Europe (excluding UK)



"Future projects in deeper waters, further out from shore – that's where the challenge lies," Gardiner added.

"But we are seeing excellent evidence of cost reduction. With more projects, more experience, that obviously helps drive that cost down."

Debt liquidity

On the financing side, most of the early technical difficulties that for a while characterised offshore wind development have been ironed out – a crucial step forward that has helped attract new pools of capital to the market. Banks from China and Korea are now said to be circling, along with several institutionals, and the new liquidity these lenders offer may be vital in financing the glut of deals expected to come to market in the coming months. To date though – as Figure 2 shows – commercial banks from Germany, the Netherlands, Japan and the UK have led the way, with honourable mentions for French and Spanish lenders. Meanwhile multilaterals like the EIB have also played important roles in filling a perceived funding gap in the sector.

The strong competition for deals from lenders has driven debt pricing down sharply over the last two years. The 300-325bp range seen on Gemini in 2014 is notably higher than the 200-225bp from 2015's Veja Mate, for instance.

Many in the market thought Veja Mate's pricing was about as low as offshore wind could currently go, but even these terms are understood to have been undercut by Rentel in Belgium, which is expected to reach financial close before the summer.

Jérôme Guillet, one of the founders of Green Giraffe, which advised on Veja Mate and is acting in a similar capacity on Rentel, said the pricing squeeze suggests there is still plenty of appetite from banks.

The only question then is whether there is enough debt liquidity in the market. Phil Roberts, head of energy and

natural resources at MUFG, noted that individual offshore wind projects were getting bigger and as such the sector's debt requirement was larger. However, institutionals are among those able to come in to help, he said.

Upcoming refinancings

Institutional debt providers made headlines last year [2015] after two major bond financings – Blackstone's refinancing of its Meerwind project and Global Infrastructure Partners' acquisition of a 50% stake in DONG's Gode Wind 1.

Market observers note that with Meerwind specifically, the cost of funding in the end was not too dissimilar from what is available in the banking market – especially given the asset is operational. However, the introduction of institutionals to the deal clearly frees up the project's existing banks to deploy their capital into construction deals, on which the presence of banks is more important.

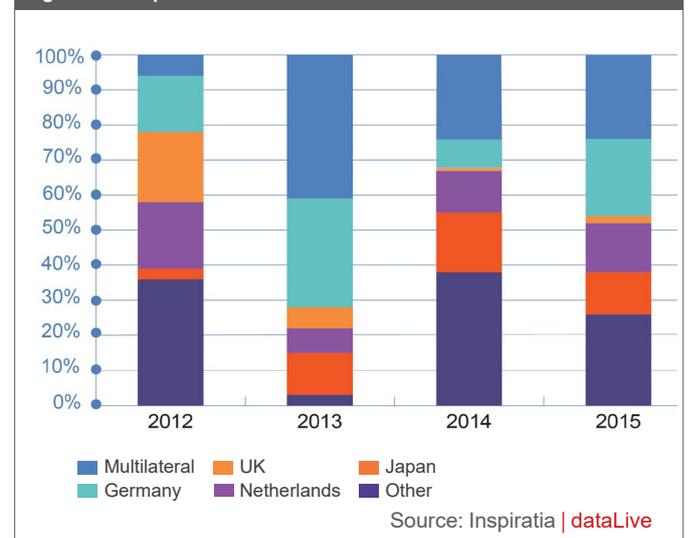
Following Meerwind, some expect a wave of offshore wind refinancings to come to market. Stephen Tobin, a partner at Pinsent Masons, said many of the earliest deals now look expensive, which present further opportunities for other forms of capital.

"Over the next couple of months, I think we'll see a few refinancings coming through and maybe see some US money coming into the structure as well. The sector is increasingly trying to move money around from the banks into some of those longer-term institutional investors," he commented.

MUFG's Phil Roberts added that there were different drivers for refinancings – a major one being asset sales to financial investors who require some form of leverage. "For institutionals, offshore wind is attractive from a yield perspective," he said.

An arguably more significant trend than institutionals refinancing operational assets is the fact some are now

Figure 2: European offshore wind – source of debt



coming in at primary syndication stage on bank deals. The likes of [Rivage Investment](#) and SCOR took syndicated tickets on a couple of greenfield deals last year, for instance.

Jérôme Guillet of Green Giraffe noted that there was a growing number of institutions that do these kind of transactions. This might not be too surprising given many have the same kind of teams, doing the same kind of risk analysis, as banks.

"We may even see some of them take big tickets and come right into the first pool that actually signed the deal as arrangers," he added.

Equity interest

Away from debt, increased competition on the equity side and a better collective understanding of risk has forced offshore wind investors to adjust downwards their return expectations.

IRRs are still said to be at the top end of what is considered typical for infrastructure returns, but offshore wind is no longer in a different universe.

"On a number of deals, depending on how the construction phase is contracted – whether there is some form of EPC wrap in place – we have a lot of equity investors asking us for more risk, so they can get more return, which doesn't always necessarily fit with our strategy," noted DONG Energy's Kunal Patel.

Nick Gardiner of the GIB said there remained a risk premium element in offshore wind for construction risk, which he described as "still the major challenge" in the sector. But as understanding improves, more investors are beginning to have appetite.

Canadian energy group [Enbridge](#) is just one of a number of new players to enter projects in the last year – taking a minority stake in [E.ON's](#) construction-stage Rampion wind farm in the UK, alongside the GIB, and partnering with EDF on a suite of development-stage projects in France. Others said to have interest in the sector include Singapore's GIC and Canada's Borealis.

The interest is driven partly by the lack of assets in Europe, according to Stephen Tobin of Pinsent Masons. Investors are increasingly seeing energy as a growth area, including Chinese groups who see it as a way to diversify their industrial base.

New horizons

While there appears to be enough primary and secondary activity in Europe to keep the offshore wind industry busy,

many players are now setting their sights on developments further afield.

The US is one market that is piquing the interest, though its progress so far has been slow because of difficulties with permitting and regulation. However, the US has the benefit of learning from Europe's experiences, and a number of groups are now said to be working to educate lawmakers on key matters like subsidies and the supply chain.

Having built a number of projects in Europe, DONG has in the last year or so acquired two 1GW development sites in US waters – off Massachusetts and New Jersey.

"The potential in the US is massive," said Kunal Patel.

"We certainly see the market fundamentals on the eastern seaboard being quite strong, in that there is very little actual generation in those states, electricity prices are quite high and they've suffered from high seasonal variations in electricity price and demand. That all fits very well with what offshore wind can provide."

On the financing side, the five-turbine 30MW Block Island scheme became the first project financed US offshore wind farm early last year [2015] – a deal on which Green Giraffe was an adviser.

Jérôme Guillet said, "The US has understood that once you have the pipeline, everything will fall in place and the lessons from Europe will be brought in. They have their own expertise – you've got Gulf of Mexico marine construction experience that will be brought in – but there needs to be political decisions to make it happen."

On the other side of the globe, there is offshore wind interest in China and Taiwan. In the case of the former though, Stephen Tobin said there are transmission challenges that could prove difficult to overcome.

Finally, places like Japan, California and parts of the Mediterranean – with their long, deep coastlines – could lend themselves well to floating wind technology.

France's floating wind tender attracted the likes of [EDF EN](#), [Engie](#), [EDP Renovaveis](#), [Caisse des Depots](#) and [China General Nuclear Power Group](#), while pilot developments being built off Scotland and Portugal will help to bring costs down. For now though, it goes without saying that where the geographical resources lend themselves well to fixed foundations, those will continue to take precedence.

That said, if sufficient advancements are made, it may not be long before banks begin to take a tangible interest. Phil Roberts of MUFG concluded, "At some point people will finance floating – the question is: what's the path to get there? Of course, you just need good sponsors, good warranties, good construction and some proven projects." -

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