Q7 Dutch offshore wind

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With northern European onshore wind markets either approaching saturation point (Germany, Denmark and the Netherlands) or facing chronic delays in planning (the UK and Ireland), offshore wind should be set for a renaissance.

However the well-documented problems of maintenance costs and an inability to secure EPC contracts have meant that offshore wind projects have been limited in scale and almost exclusively procured on balance sheet.

So the financing of Econcern, Eneco and Energy Investments €383 million 120MW Q7 Wind Park off the Dutch North Sea gives the industry substantial grounds for hope.

The deal is only the second non-recourse offshore wind financing - after the 60MW North Hoyle wind farm which formed part of the Beaufort wind portfolio - and the first to be financed as a single asset.

With a host of capital-intensive offshore wind mega-projects approaching finance on the UK market, the deal sets a hugely important precedent.

The Dutch wind market

The Netherlands has a renewable target of nine per cent of generation from renewables by 2010 - to be procured on a province-by-province basis - but with limited prospects for hydro, solar or geothermal, 2,415MW of that is due to come from wind energy.

However with 1,453MW already established onshore in a relatively densely populated country, several Dutch provinces have turned to the country's North Sea coast to provide 700MW of their wind capacity.

The government subsidises renewable energy development through one of the most generous mechanisms in Europe - the MEP (Milieukwaliteit van de Elektriciteitsproductie) - a guaranteed ten-year feed-in tariff, priced in two-tiers depending on the technology used.

Offshore wind is priced in the upper grouping with wave, hydro, PV and biomass and receives a subsidy of 6.8 cents per kWh, while onshore wind receives just 4.9 cents per kWh.
The first offshore wind project in the Netherlands was the 108MW Egmond am Zee - a joint venture between Shell Wind Energy and Dutch utility Nuon. Construction and procurement were sub-contracted to Vestas and Ballast Nedam.

However on the combined balance sheet of Nuon and Shell - building the 1000MW Thames Array - even overruns on the €250 million project costs would be a drop in the ocean.

The challenge would be to relicate the deal on a commercial basis.

The project

In 2002 original project company E-Connection won a licence to develop the Q7 block of the Dutch continental shelf where shallow water depths of 19-24 metres would allow turbine foundations to be sunk.

However, the development of an offshore wind project would require more financial muscle and in December 2004 a JV of established energy developer Econcern and equity partner Energy Holdings acquired the project.

In March 2005 the JV secured the co-operation of Dutch provinces through utility Eneco - in which seven Dutch provinces own a combined stake of 67 per cent - which agreed to provide half of the project equity as well as a PPA for the whole project production.

On the back of this agreement Q7 Windpark (Q7WP) mandated Dexia and Rabobank as MLAs.

Even with bank financing, PPA and healthy subsidies in place Q7WP still faced the serious challenge of hedging construction and maintenance risk in a market where EPC contracts are simply not an option.

Instead of combining all the contracts in a single EPC, Q7 Windpark turned to an innovative 'Multi-contractor' deal where four subcontractors will divide the construction tasks and crucially the turbine maintenance:

- Vestas will provide the 60 2MW turbines along with a five plus five year Operation and Maintenance contract
- Van Oord Dredging and Marine Contractors will install turbine foundations through subsidiaries Mammoet Van Oord and Van Oord offshore
- Engineering firm ABB will provide power and cable connections to mainland
- Bladt Industries will build an offshore substation
- Smulders Projects will manufacture the concrete turbine foundations

On 10 October, Van Oord's Jumping Jack offshore construction platform laid the first Q7 Windmill Foundation. The wind farm is anticipated to be completed by Q1 2008.

The financing

Financial close was achieved with a mixture of commercial bank debt including an export credit guarantee facility and a construction loan. Rabobank and Dexia were mandated in March 2005 and pricing for the loan was set at Euroribor plus 150bp-200bp.

Denmark's Eksport Kredit Fonden (EKF) joined in to support the sale of equipment by Vestas.

Funding came from a €219 million, 11-year non-recourse loan including a €69 million export finance guarantee in favour of the MLAs from EKF. The loan agreement was signed on 25 October.

The deal is the first ever single-asset non-recourse project financing for an offshore wind farm. A limited syndication of the term loan is expected to be concluded before year-end.

A further €160 million construction loan with a tenor of 18 months was provided by Dexia and Rabobank.

In order to mitigate construction risk, a contingent facility including an equity contingency provided by ENECO is available to cover potential cost overruns or delays.

Once the wind farm is up and running a cash sweep mechanism kicks in addition to an availability guarantee arrangement with the operator (Vestas) that secures steady debt service payments even during periods of lower than expected output.

The project also benefits from a comprehensive, 11-year insurance programme with Delta Lloyd.

EKF is not stranger to the financing of wind farms. It has already provided guarantees backing the financing of wind farms using Danish turbines around the world.

The equity portion on the deal was €164 million with Enerco providing 50 per cent, while the other 50 per was invested by Econcern and EIH.

Econcern is currently developing the Scira offshore wind farm in the UK. According to Ernst van Zuijlen, a project manager at Evelop - a subsidiary of Econcern - financial close for the £650 million project will be achieved in 2009.

Conclusion

While the Q7 Windpark may have provided breakthroughs in its deal structure and sub-contracting arrangements - the financing of UK deals

A UK renewables financier says, 'The financing for the Q7 deal was arranged 18 months ago. In the last two years banks have fallen over their feet to arrange an offshore wind project.'

Margins on Warwick Energy's Thanet deal - due to close at year-end - and next year's Airtricity-sponsored Greater Gabbard project are expected to be driven down as low as LIBOR plus 110-130.

In light of the fact that the level of the UK offshore ROC has yet to be arranged and will offer nothing like the security of the Dutch ten-year feed-in tariff, that contraction in spreads must be viewed as a function of increasing competition, and not a result of declining risk.

The project at a glance

Project Name	Q7 Windpark
Location	23km west of Ijmeiden on the Dutch west coast
Description	120 MW, 60 turbine wind farm located in water with a depth of 19-24 metres
Sponsors	Renewables developer Econcern, Netherlands energy utility Eneco Energie and renewable energy investor Energy Investments NV
Operator	Vestas
Sub-contract 1	Vestas five plus five year operation and maintenance contract
Sub-contract 2	Van Oord Dredging and Marine Contractors - installation of turbine foundations and turbines through subsidiaries Mammoet Van Oord and Van Oord offshore
Sub-contract 3	ABB - power and cable connections to mainland
Sub-contract 4	Bladt Industries - substation construction
Sub-contract 5	Smulders Projects - construction of concrete turbine foundations
Construction Stage	Under construction
PPA	PPA for the entire output signed with Eneco
Total Project Value	€383 million (excluding construction facility)
Total equity	€164 million
Equity Breakdown	Enerco provides 50 per cent, while the other 50 per cent comes from Econcern and EIH.
Total senior debt	€219 million
Maturity senior debt	11 years
Senior debt pricing	Euribor + 150bp-200bp
Mandated lead arrangers	Dexia and Rabobank for €219 million 11-year non-recourse loan and €160 million construction facility
Debt:equity ratio	60:40
Export credit agency support	€68 million guarantee from EKF for Vestas equipment
Construction loan	€160 million
Maturity of construction loan	18 months
Insurance	11-year comprehensive insurance package from Delta-Lloyd
Financial Adviser to sponsor	Profin
Legal Adviser to sponsor	Sibbe, CMS Derks Star Busmann
Legal adviser to banks	Allen & Overy
Insurance adviser to sponsor	Marsh
Insurance adviser to banks	Miller Insurances
Technical adviser to sponsor	Advistaal
Technical adviser to banks	Mott MacDonald
Date of financial close	25 October 2006