

# INSURING YOUR WAY TO 33,000 MWs BY 2020

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**“To make a great dream come true, the first requirement is a great capacity to dream...”**

Offshore wind has travelled from the fringe of the political energy debate to become a central plank in the future energy strategy of the UK. Why then do we read populist headlines casting the sector as risky, unreliable, overly expensive and technologically doubtful?

Certainly, daunting infrastructural and economic challenges lie ahead, swaying current thinking. Leaps in technology and realignments of interests into strategic alliances are vital in the journey to 33,000 MWs.

**“...the second is persistence.”**

For renewable energy practitioners, offshore wind must be a simple and robust technology to answer future energy security in our decarbonised economy. It must also lower the marginal price of power for the end users, strengthening the UK macro economy and green collar workforce.

The UK is a world leader in offshore wind. With eight offshore projects operational and a further five currently under construction, the UK will have doubled its capacity by the end of 2009, which only leaves a further 6500% growth by 2020: it won't all be plain sailing - stormy waters lie ahead. Development hurdles, escalating costs, project delays and transmission and distribution present challenges to even the most experienced project developers. So how will the sector grapple with these growing pains and to what extent will this change the risks encountered by developers?

The Crown Estate has received 40 bids for the nine development licences available in the competitive tender process for Round 3. While utility companies continue to lead the charge, cooperation and strategic alliances as well as supply chain partners are now de rigueur. This new era of partnership will add value, experience and expertise to the projects proposed to spread and reduce risks. Lessons learned should decrease the likelihood of mistakes; though multi-contracting strategies, more complex interfaces and off-balance sheet finance will create new challenges.

The economics of offshore wind are clearing but there is no consensus as to strategy for driving down unit cost per MW. Bigger, heavier 'mega' wind turbines - or a large number of smaller installations? Either way, increased economies of scale and fresh technologies will depress the currently high production unit cost per MW. Simple, smaller and low cost serviceable units will need to be in the mix.

The financial risks associated with project development will decrease as half of the development costs for each of the nine licences will be shouldered by the Crown Estate. The British government has also promised £525 million in support for offshore wind investments that reach financial close between now and 2011 via the Renewables Obligation Certificates (ROCs). This timeframe is demanding but, ultimately, will improve the risk-reward balance of developing offshore wind farms and has positive implications for project financing.

We are at a bottleneck, planning to squeeze more projects through a scarce resource. Projects will move further offshore for installation in rougher and deeper waters. Developers already faced difficulties in meeting project milestones during the British summertime for Rounds 1 and 2.

The risk of project delays will only increase unless new vessels, such as jack-up barges, are built to withstand the rougher seas and achieve turbine installation for heavier units well beyond the normal weather window. Similarly, greater supply chain investment - such as supporting design innovation - is needed if the scale up of Round 3 projects is to be fully realised. Some pioneers are already designing and building floating substructures to support and secure turbines in deeper waters. Such innovation carries with it substantial and unavoidable risk but the industry cannot thrive by 2020 without these risk takers and their pioneering vision.

One of the exciting proposals for the seemingly intractable issue of transmission and distribution is the creation of an offshore "supergrid" in North Western Europe. Nearly all developers have grappled with the transmission and distribution issues that lead to considerable export and array cable insurance losses. Such losses seem to be inherent to the offshore environment. This proposed innovation may be one of the ways to buffer the collective exposure among projects and negate single point failure risks.



Risk confronts us and requires solution mechanisms such as management, mitigation and transfer. Contract, physical, Professional Indemnity and liability risk demand such solutions be grounded in partnerships, founded on dialogue and mutual understanding between specialists. As technical innovations are created, so the risk horizon expands.

At Willis Renewables we are passionate specialists in the business of anticipating and innovating risk solutions to match these needs. Insurance plays a part in climate change and responding to the challenge of the next decade.

Willis is proud to be the insurance adviser and broker to some of Europe's leading utilities in the build up to 33,000 MWs. Like our clients, we value partnerships early on in the project life cycle and relish the opportunity to generate insurance solutions to meet their needs.