

# Offshore Wind – Delivering the Sector

Accessing Bank Liquidity

**Andrew Buglass**

Head of Power, Structured Finance

30 June 2010

---

# RBS – A Leader in the Renewables Sector

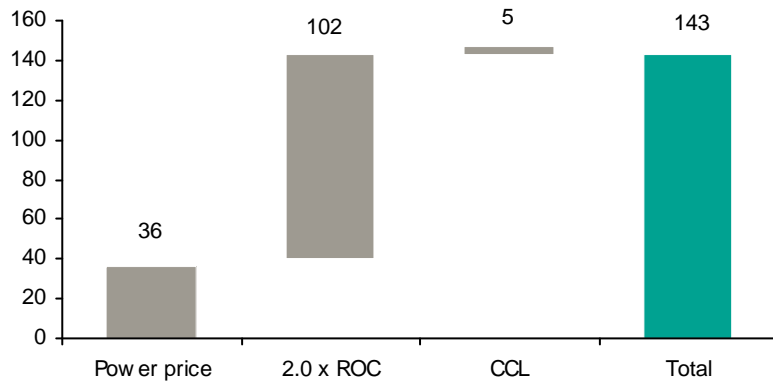
<b>Background</b>	<ul style="list-style-type: none"><li>• Lending to renewables projects since 1991</li><li>• Almost 9GW of renewable projects financed worldwide</li><li>• £6.3 billion financed since 2005</li><li>• Deep and proven expertise in power markets globally, and particularly in the UK power market</li></ul>
<b>Our Mandate</b>	<ul style="list-style-type: none"><li>• Clear mandate to support existing and new clients across the power sector</li><li>• Strong access to capital and management support for sector</li><li>• Partnering with government, regulators and key market participants</li><li>• Anticipating and responding to new sector opportunities</li></ul>
<b>Innovation</b>	<ul style="list-style-type: none"><li>• Actively supporting offshore projects with material lending commitments</li><li>• Develop and implement new funding structures to maximise availability of capital</li><li>• Proven record in attracting and mobilising multiple sources of debt funding</li><li>• Flexibility will be key to securing the investment volume required to meet the UK's offshore targets</li></ul>

# The UK Offshore Market – Strong Growth Potential

- Renewable Obligation Order 2009 – extension of RO, headroom of 10%
- EU targets – 20% by 2020
- ROC banding- attractive incentive scheme, 2 ROCs/MWh until 31 March 2014
- Attractive wind resource

- UK is global leader for investment in offshore wind:
  - 1.04GW installed capacity
  - 1.5GW under construction
  - 2.6GW consented
- Total planned capacity of 33GW by 2020
  - (8GW in Rounds 1 & 2 and 25GW in Round 3)
- Project size increases significantly in latter projects

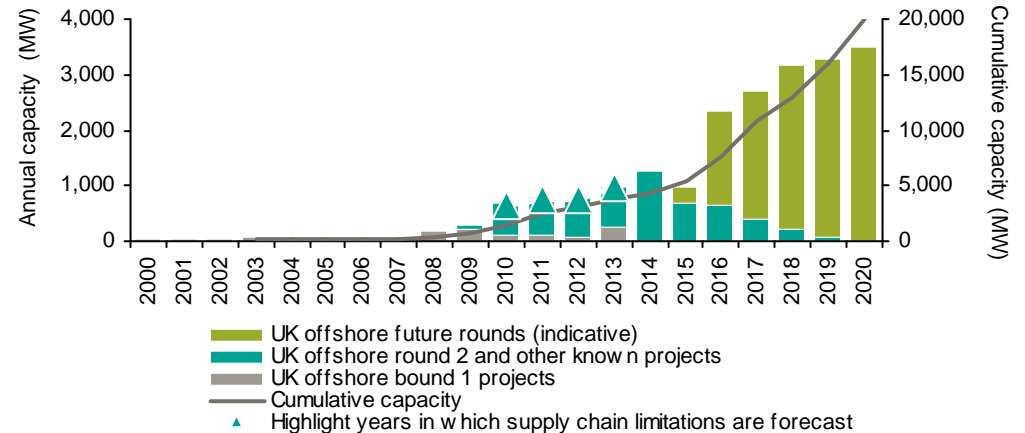
UK incentive for offshore (GBP/MWh)



Source: POYRY

Note: Power price average 2010

UK offshore wind capacity with supply chain limitations imposed (MW)



Source: BWEA

# Challenges to Accessing Capital

<b>Size of Investment</b>	<ul style="list-style-type: none"><li>• Estimated further investment of £70 billion required to meet 2020 target</li><li>• Economic downturn has reduced availability of both debt and equity Larger deals require much more capital, <u>BUT</u>:<ul style="list-style-type: none"><li>– Sponsor balance sheets constrained?</li><li>– Bank lending volume reduced</li></ul></li></ul>
<b>Issues for Lenders</b>	<ul style="list-style-type: none"><li>• Risk sharing in relation to construction phase?</li><li>• Comfort with newer entrants in the supply chain?</li><li>• Larger consortia for Rounds 3 attracting “non-traditional” offshore sponsors – financial investors</li><li>• Constraints of “club” transactions – managing multiple parties</li></ul>
<b>Regulatory Risk</b>	<ul style="list-style-type: none"><li>• Volatile power prices and volume risk</li><li>• Uncertainty in ROC banding for offshore windfarms beyond 2014</li><li>• Introduction of Feed in Tariff offshore??</li></ul>
<b>OFTO Process</b>	<ul style="list-style-type: none"><li>• Transitional regime – uncertainty and complexity of process for sale of OFTO assets</li><li>• Enduring regime – potential impact on Round 3 projects</li></ul>

---

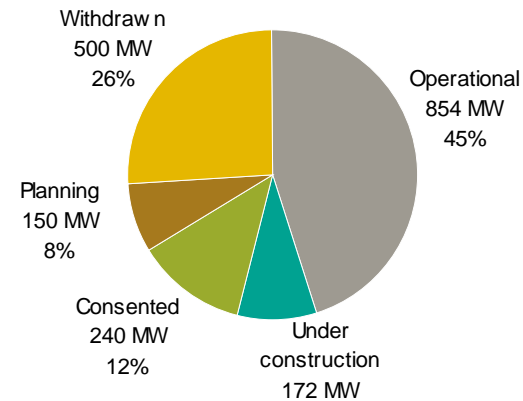
## Challenges to Accessing Capital (continued)

<b>Technology and Engineering</b>	<ul style="list-style-type: none"><li>• Larger projects lead to more complexity and engineering challenges</li><li>• Scale-up issues with increasing size of turbines and installation in deeper waters further from shore</li><li>• Ramp up of appropriate engineering skills and training will be significant</li><li>• Multi-party contracts with interface risk</li><li>• Introduction of new foundation technologies to meet deeper water requirements</li></ul>
<b>Long Term O&amp;M</b>	<ul style="list-style-type: none"><li>• Harsh offshore environment causes more stress and higher loads on the turbines</li><li>• Challenges in accessing turbines due to weather conditions</li><li>• Further offshore locations add to logistical difficulties</li></ul>
<b>Supply Chain Constraints</b>	<ul style="list-style-type: none"><li>• Bottleneck in manufacture of cables across the voltage range</li><li>• Constraints in availability of vessels for installation and ongoing O&amp;M</li><li>• Need for expansion of construction ports with appropriate access to sites</li></ul>

# Delivering a Successful Financing

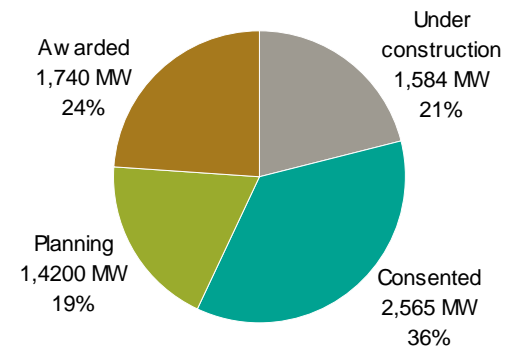
- Consortium structures will need to allow multiple funding options for sponsors
- Broaden sources of debt capital
  - EIB, ECAs, Green Investment Bank, project bonds
- Depth of market for long-term, committed offtake??
- Early lender input into all key contracts is essential
- Balanced risk sharing between sponsors and lenders
- Strong contractual package reducing interface and design risk. Appropriate level of Liquidated Damages and warranties
- Lenders require proven track record in consortia, both at sponsor level as well as along entire supply chain
- Contingency planning and realistic budgets
- Stable regulatory regime to mitigate price and volume risk

## Round 1 – project status 1.9GW



Source: BWEA

## Round 2 – project status 7.3GW



Source: BWEA

# Positive Outlook for the Future

<p><b>Progress</b></p>	<ul style="list-style-type: none"> <li>• Projects are receiving consents and being constructed, with over 1GW in operation</li> <li>• Project financings are being completed successfully</li> </ul>
<p><b>Debt</b></p>	<ul style="list-style-type: none"> <li>• Liquidity is returning as market conditions improve</li> <li>• Growing lender appetite for sector</li> <li>• Pool of commercial banks with understanding of sector and risks is increasing</li> </ul>
<p><b>Equity</b></p>	<ul style="list-style-type: none"> <li>• Utilities focussing on this sector have very ambitious growth plans</li> <li>• Appetite for long-dated assets from sovereign wealth funds, private equity, infrastructure funds</li> </ul>
<p><b>Government Support</b></p>	<ul style="list-style-type: none"> <li>• Strong support for renewable sector - UK as world leader in offshore wind</li> <li>• Push for EU target of 20% to be increased to 30%</li> <li>• Creation of Green Investment Bank may provide further support for offshore wind projects</li> </ul>

“We recognise our responsibility to support infant and emerging technologies – like renewables ... – while removing unnecessary barriers to investment, like planning, offshore connections and grid bottlenecks”

**Chris Huhne – Energy Minister, June 2010**

“We will seek to increase the target for energy from renewable sources, subject to the advice of the Climate Change Committee”

**Clarity of policy – Coalition Agreement extracts**

“Climate change is one of the most serious threats that the world faces. The Prime Minister has pledged to make this the greenest government ever”

**June 2010 Budget**

“...compelling factual evidence of the huge potential of the UK’s offshore renewable energy resource... the North Sea will become the Saudi Arabia of wind energy”

**The Offshore Valuation May 2010 – Study by RenewableUK**

---

# Contact Details

---

## Andrew Buglass

Head of Power, Structured Finance

Tel: +44 20 7085 5924

Email: [andrew.buglass@rbs.com](mailto:andrew.buglass@rbs.com)

---

This marketing communication has been prepared by The Royal Bank of Scotland N.V., The Royal Bank of Scotland plc or an affiliated entity ('RBS') and for the purposes of Directive 2004/39/EC has not been prepared in accordance with the legal and regulatory requirements to promote the independence of research. Regulatory restrictions on RBS dealing in any financial instruments mentioned at any time before is distributed to you do not apply. This document has been prepared for information purposes only. It shall not be construed as, and does not form part of an offer, nor invitation to offer, nor a solicitation or recommendation to enter into any transaction or an offer to sell or a solicitation to buy any security or other financial instrument. No representation, warranty or assurance of any kind, express or implied, is made as to the accuracy or completeness of the information contained herein and RBS and each of their respective affiliates disclaim all liability for any use you or any other party may make of the contents of this document. The contents of this document are subject to change without notice and RBS does not accept any obligation to any recipient to update or correct any such information. Views expressed herein are not intended to be and should not be viewed as advice or as a recommendation. RBS makes no representation and gives no advice in respect of any tax, legal or accounting matters in any applicable jurisdiction. This document is not intended for distribution to, or use by any person or entity in any jurisdiction or country where such distribution or use would be contrary to local law or regulation. The information contained herein is proprietary to RBS and is being provided to selected recipients and may not be given (in whole or in part) or otherwise distributed to any other third party without the prior written consent of RBS. RBS and its respective affiliates, connected companies, employees or clients may have an interest in financial instruments of the type described in this document and/or in related financial instruments. Such interest may include dealing in, trading, holding or acting as market-makers in such instruments and may include providing banking, credit and other financial services to any company or issuer of securities or financial instruments referred to herein. This marketing communication is intended for distribution only to major institutional investors as defined in Rule 15a-6(a)(2) of the U.S. Securities Act 1934. Any U.S. recipient wanting further information or to effect any transaction related to this trade idea must contact RBS Securities Inc., 600 Washington Boulevard, Stamford, CT, USA. Telephone: +1 203 897 2700.

The Royal Bank of Scotland plc. Registered in Scotland No. 90312. Registered Office: 36 St Andrew Square, Edinburgh EH2 2YB. The Royal Bank of Scotland plc is authorised and regulated by the Financial Services Authority.

The Royal Bank of Scotland N.V., established in Amsterdam, The Netherlands. Registered with the Chamber of Commerce in The Netherlands, No. 33002587. Authorised by De Nederlandsche Bank N.V. and regulated by the Authority for the Financial Markets in The Netherlands.

The Royal Bank of Scotland plc is in certain jurisdictions an authorised agent of The Royal Bank of Scotland N.V. and The Royal Bank of Scotland N.V. is in certain jurisdictions an authorised agent of The Royal Bank of Scotland plc.

© Copyright 2010 The Royal Bank of Scotland plc. All rights reserved. This communication is for the use of intended recipients only and the contents may not be reproduced, redistributed, or copied in whole or in part for any purpose without The Royal Bank of Scotland plc's prior express consent.

---



# Offshore Wind 2010

Liverpool | 29–30 June

Sponsored  
by Subocean

