

## **Financier's Perspective On Project Finance For R3 Construction And O&M**

Windpower monthly – Vessels and Access forum

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## Financing offshore wind

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#### Topics and key messages:

- “What is a financier looking for in a finance application for a Round 3 wind power project”
  - *The same as before....equity and debt markets have grown and will continue to do so*
  - *EMR has its benefits but it has introduced more upfront equity risk*
- “Concerns around the wind industry’s approach to Round 3 technologies and conditions”
  - *Move to Round 3 does offer fresh challenges but nothing should be unsurmountable*

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3. Future challenges – focus on Round 3
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## GGEB – the offshore wind finance specialists

We have an unparalleled track record in successfully closing deals for our clients

- 20 professionals in London (UK), Paris (FR), Utrecht (NL) and Hamburg (DE)
- Project & structured finance, full scope equity advisory and contracting expertise
- Focus on renewables and specifically offshore wind

Advisor to C-Power to raise project finance debt

325 MW




Belgium  
2010



Advisor to Northwind to raise project finance debt

216 MW



Belgium  
2012



Non-recourse financing of 25% stake in Walney offshore wind farm

367 MW



UK  
2012



Advisor to WindMW to raise project finance debt

288 MW



The Blackstone Group\*

Germany  
2011



Financial advisory services French offshore wind tender

1,428 MW



France  
2012

Advisor to Highland in the acquisition of the Deutsche Bucht project

210 MW

Highland Group Holdings

Germany  
2012

## 1. The equity market

### Investors and appetite for risk

Investor	Permitting	Development	Construction	Operations	Notes	PF?
Utility	Yes	Yes	Yes	Yes	A proven solution	Potentially
IPP	Yes	Yes	Yes	Yes	Not many active yet in offshore wind, but several have shown intention	Yes
Private equity	Some	Some	Some	Yes	Require high returns	Yes
Municipal utility	No	Maybe	Some	Yes	Decision process is slow and risk avoidance requirements can be stringent. Conversely, <b>required IRRs are low</b>	Probably
Sovereign wealth funds	No	Maybe	Some	Yes	Require simple contracting structure, long term O&M agreements and <b>controlling</b> partner. Masdar has taken on construction risk on LA	Not necessarily
Infra funds	No	No	Maybe	Yes	A large universe. Most still <b>require construction risk mitigation and long term O&amp;M agreements</b>	Probably
Corporations	No	No	Maybe	Yes	-	Not necessarily
Pension funds	No	No	Maybe	Yes	-	Not necessarily
Contractors	No	Maybe	Yes	Yes	-	Not necessarily
Community owners	No	Maybe	Yes	Yes	-	Probably

## 1. The equity market

### Valuations and risk

- **An active market – and a wider range of investors beyond utilities than people assume**
  - Infrastructure funds and pensions funds (PensionDanmark, PKA, Industries Pension, TCW, PGGM)
  - Private equity groups (Blackstone, etc.)
  - Corporations with specific strategies (LEGO, Colruyt, Marubeni)
  - .... and many more sniffing around the sector
- **Valuations are actually relatively consistent**
  - Permitted projects – development cost + premium @ 200kEUR/MW
  - Contracted projects – construction cost @ 3.5MEUR/MW unlevered (or 1.1 MEUR/MW levered)
  - Operational projects – linked to regulatory framework and IRR target of investors (8-10%)
- **Trade off between construction risk and returns now closely examined**
  - As more assets are operational, the universe of investors grows and IRR targets are going down
  - A number of investors are now looking to take construction risk to improve returns (to double digits)
  - A “bankable” deal is also one which many investors can find attractive

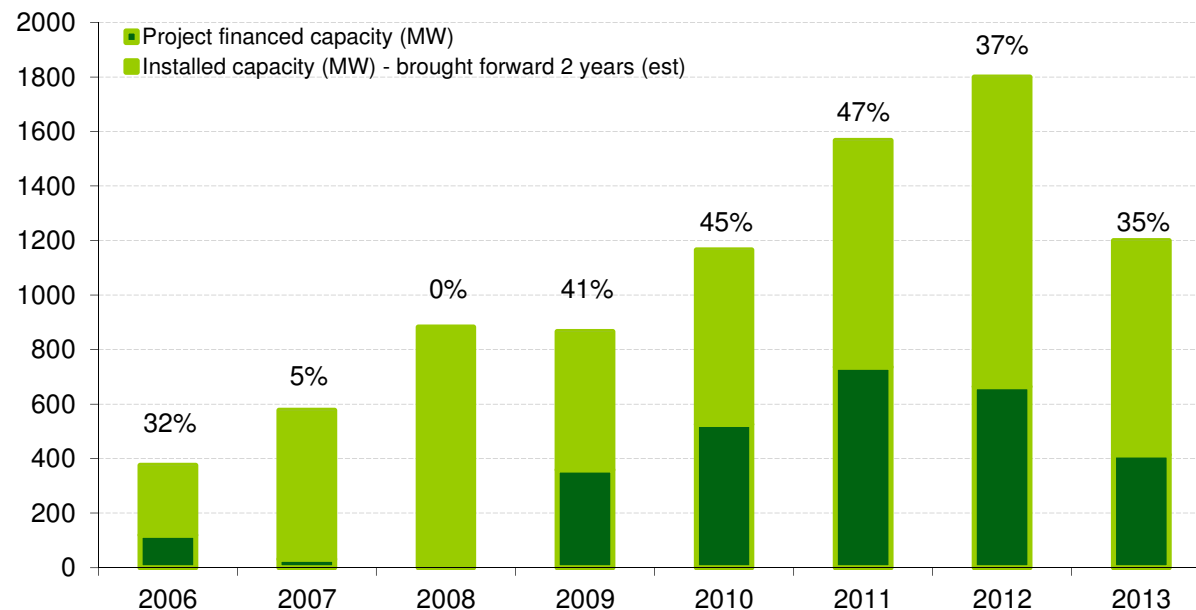
## 2. The debt market: lessons learned from the early years

The banking market is there if the transactions are well structured

### Lessons learned from the first projects – now up and running

- The first projects using project finance closed in the “early years” (2006-2009) are now in operation
- Construction has never been easy (it is a full-time job for the banks as well) but mechanisms to limit the risk have proved to be successful and most projects using PF have been built on time and within budget (including contingencies)

Offshore wind project financed volumes



### An active PF market becoming mature

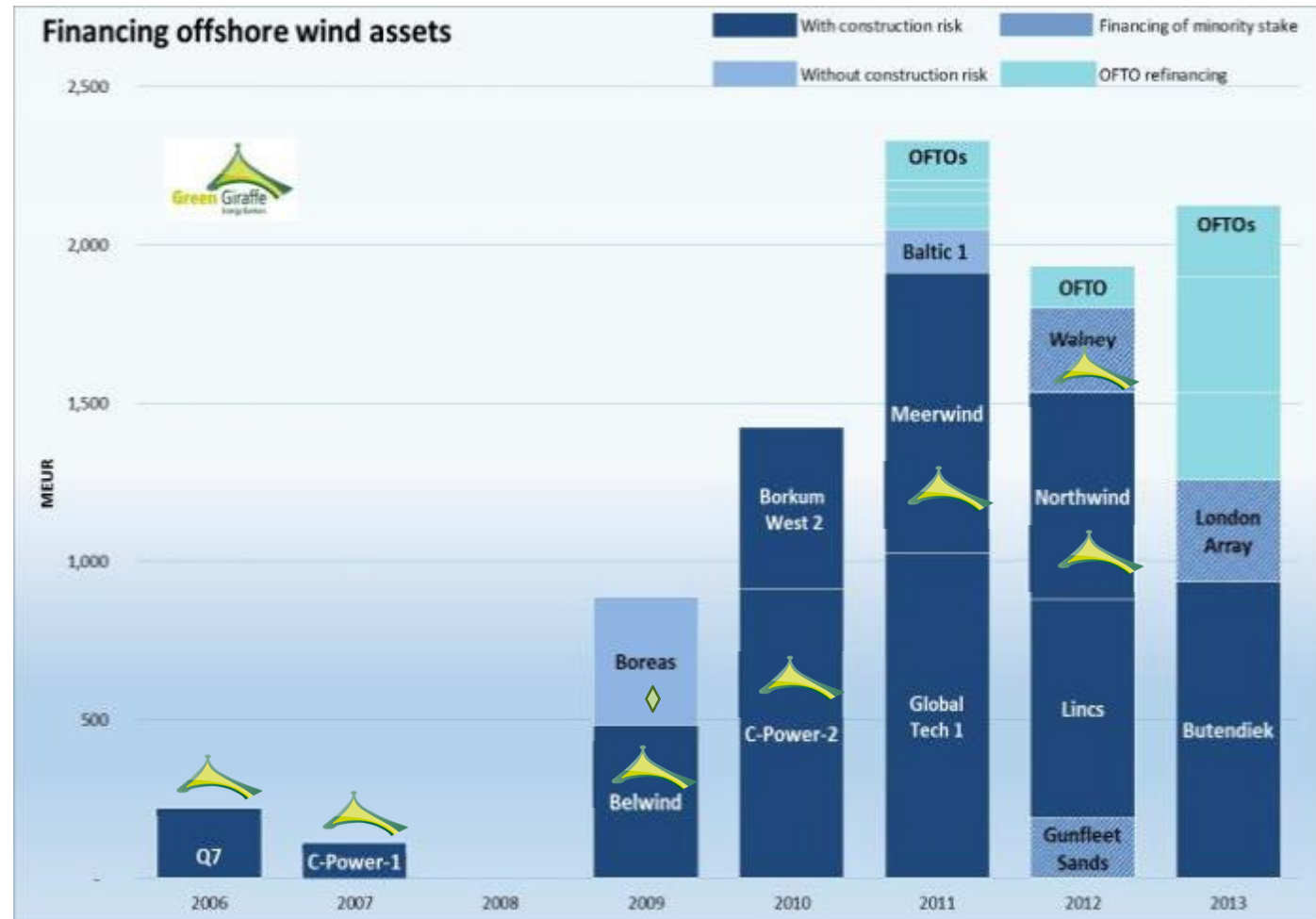
- Most active market ever, despite the crisis and the atmosphere of gloom
- No bank or individual institution is indispensable
- Debt sizing principles are quite stable and predictable
- Due diligence standards and main covenants are similar across transactions
- The same rules apply in different countries and with different banks involved

## 2. The debt market: some recent highlights

A number of large transactions have taken place

### Notable transactions:

- **C-Power** – Belgium – 2010: billion-euro senior debt can be raised with construction risk for a project with new turbine
- **Meerwind** – Germany – 2011: private equity enters into the market and uses PF
- **Lincs** – UK – 2012: there is no “UK malediction” with construction risk and project finance
- **Walney** – UK – 2012: first commercial financing of a minority stake



## 2. The debt market: some recent highlights

2 transactions in 2013 and more in the pipeline

- **Butendiek** (DE, 288 MW, Siemens 3.6 MW, EUR 940 M financing)
  - First transaction under the new grid law in Germany
  - Full construction risk, on a billion-euro scale, borne by both lenders and financial investors
- **London Array** (UK, 126 MW, Siemens 3.6 MW, GBP 266 M financing)
  - Refinancing of Masdar's 20% stake in the 630 MW project at completion
  - Very long process, as it was started in 2009

And pending...

- **Gemini** (NL, 600 MW, Siemens 4.0 MW, financing launched)
  - Transaction currently on the banking market
  - Would be the largest ever wind financing (PFI has reported an amount of EUR 2.26 billion)
  - Closing expected Q2 2014
- **MEG1** (DE, 400 MW, Areva M5000, financing launched)
  - Financing launched by equity consortium
  - Closing expected H2 2014



## 2. The debt market: current market – volumes available

### Commercial banks

#### The bank market is broader and broader

- More than 30 banks have taken offshore wind risk today
- More than 20 banks have construction exposure
- Experienced banks – an active pool of banks able to structure and lead transactions:
  - Rabobank, KfW-IPEX, Unicredit, BoTM, SocGen, BNPP, Santander, Commerzbank, (Dexia)
  - HSH, NordLB (German focus)
- Many banks were involved in recent deals in the last 2 years:
  - Lloyds, ING, KBC, Siemens Bank, Deutsche Bank, NIBC, ASN
  - Calyon, BayLB, NAB, Helaba, SEB, Deka, DnB Nor, Natixis, NIBC, Sabadell, Nordea, BBVA, LBBW, Mizuho, SMBC
  - RBS, HSBC (UK focus)
- More have expressed their appetite

#### An average EUR 100 M available per bank per year

- EUR 30-150 M exposure per bank per year, in 1-3 deals

**At least EUR 2.5 billion available per year**

## 2. The debt market: current market – volumes available

### Public Financial Institutions

#### Several active public financial institutions

- **EIB** – historic key player with cheaper funds (support to European offshore projects), but generally conservative
- **EKF** – offshore wind's “best kept secret”: participation linked to Danish exports, up to EUR 250 M per transaction
- **Euler-Hermes** – participation linked to German exports, can do large tickets
- **KfW** – potentially large amounts available (in Germany): able to provide cheaper funding in significant volumes
- **GIB** – UK Green Investment Bank, first involved in Walney

#### Their role has been instrumental to get deals done

- Will typically bear approximately half of the risk and/or funding of a transaction
- Will normally take the same risks as the commercial banks, but they usually run their own internal assessment
- Some geographical / national restrictions
- Small deal teams, so availability is a constraint

**Can contribute as much as the commercial banks**

**Altogether, there are EUR 5 billion of debt funding available for 4-6 industrial size projects (400 MW) per year today**

### 3. Future challenges - focus on Round 3

#### Investor / lender perspective

	Factor	What's important?	
Market	Support scheme	Simplicity, certainty, stability, profitability	Largely responsibility of governments -> out of project's control
	Political and country risk	Good perception of the government, risk of default	
	Existing offshore wind market	Experienced market	
	Alternative investment options	Limited potential of shallow-water, onshore wind, solar	
Project	<b>Technical risk</b>	<b>Technology, construction schedule, interface, access</b>	Heavily influenced by project
	Project economics	Meet investor's/lenders' requirements	
	Project commercial risks	Good project structure, careful selection of contractors	

### 3. Future challenges - focus on Round 3

#### Investor / lender perspective

	Factor	What's important?	UK Round 3
Market	Support scheme	Simplicity, certainty, stability, profitability	Certainty?
	Political and country risk	Good perception of the government, risk of default	
	Existing offshore wind market	Experienced market	
	Alternative investment options	Limited potential of shallow-water, onshore wind, solar	
Project	Technical risk	<b>Technology, construction schedule, interface, access</b>	Is this really new?
	Project economics	Meet investor's/lenders' requirements	
	Project commercial risks	Good project structure, careful selection of contractors	Project scale

These points warrant further discussion

Not really a risk as projects are being broken down into manageable 'chunks' (~4-500MW)

### 3. Future challenges - focus on Round 3

#### Main features of the new support scheme, moving from market-based incentives towards fixed price support

##### Contract for difference

- Electricity sold to the market, often through a PPA
- Difference between the pre-defined strike price and an estimate of the market price (the “reference price”) paid to generator
- 15 years, fully inflated to CPI
- State-owned counterparty, only able to pay to generators what it has collected from suppliers

##### Levy control framework (“LCF”)

- Cap the total amount of yearly support for renewables
- Useful for the acceptability of renewables by consumers
- LCF budget divided between “established” technologies (e.g. onshore wind, solar) and “less-established” ones (e.g. offshore wind, wave)

##### Lack of certainty on allocation process:

- Not on a first-come-first-served basis as initially planned, immediate switch to Allocation Rounds (“ARs”). Will ARs be competitive or not among the “less-established” group of technologies? A clear answer is still awaited—Government response to the competitive allocation consultation supposed to be published in the coming days—
- Other pending issues:
  - LCF split between technology pots
  - Frequency and timing of ARs

Year	Strike prices GBP/MWh 2012 prices	
	Onshore	Offshore
2014-15	95	155
2015-16	95	155
2016-17	95	150
2017-18	90	140
2018-19	90	140

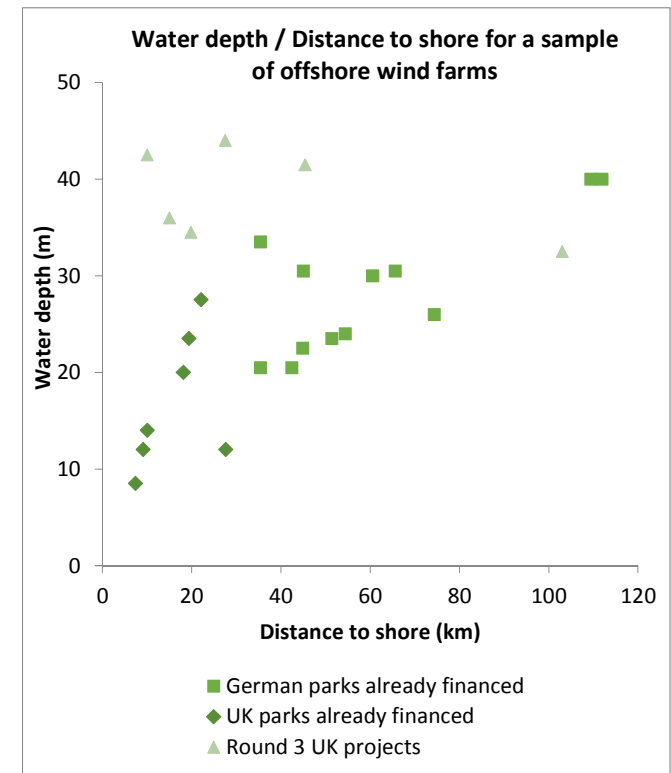
Year	Annual caps of the LCF GBP bn 2011-12 prices
2015-16	4.30
2016-17	4.90
2017-18	5.60
2018-19	6.45
2019-20	7.00
2020-21	7.60

### 3. Future challenges - focus on Round 3

#### Technology risk

- New technology risks have been taken by lenders before and they will continue to be
- However most potential changes as a result of R3 are not new to lenders, just to the UK

Category	New risk?	Comments
Increased water depth	Not really	<ul style="list-style-type: none"> <li>• German market precedent</li> </ul>
Further from shore	Not really	<ul style="list-style-type: none"> <li>• German market precedent</li> </ul>
Greater Hs / other access restrictions	Not really	<ul style="list-style-type: none"> <li>• Offshore accommodation vessels / platforms can mitigate distance</li> <li>• Helicopters are building up a track record</li> <li>• CTV access methods are developing</li> </ul>
Bigger WTGs	Not really	<ul style="list-style-type: none"> <li>• A lot of new WTGs have been banked</li> </ul>
Grid connection	Not really	<ul style="list-style-type: none"> <li>• Although a shift to HVDC might make things more challenging</li> </ul>
Foundation	Perhaps	<ul style="list-style-type: none"> <li>• Lenders may be more sensitive here</li> <li>• Floating technology?</li> </ul>



- Nonetheless lenders will only have appetite for so much risk in any one project so developers / suppliers need to proceed with caution

## 4. Conclusion

- Equity and debt markets are growing and will continue to grow
- Move to Round 3 does offer fresh challenges but non of them should be unsurmountable:
  - German deals provide precedence for more onerous site conditions
  - New technology has been banked in the past
  - These challenges will be more surmountable if project size is kept to a “reasonable” level
- We don’t expect financing to be a blocking point to the development of the supply chain
- EMR has it benefits but one potential future impact is the lack of allocation certainty under the new Levy Control Framework – but this is necessary if we are to learn lessons from others....

## Green Giraffe Energy Bankers

### Paris

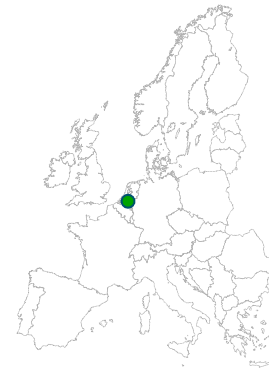


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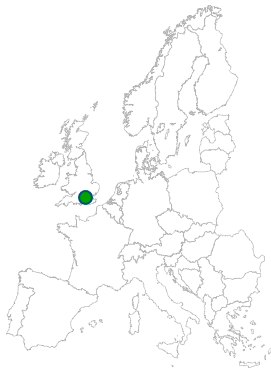


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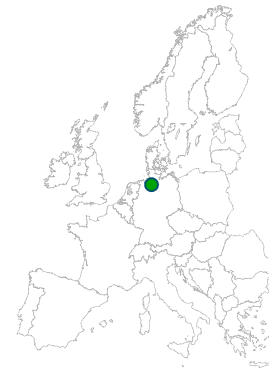


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