



Market price risk

[A banking perspective]

WindDays , 14 June 2018

Attending

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Today's agenda

- 1 Financing market price risk
- 2 Market price risk in recent financings
- 3 Zero bid context
- 4 Considerations going forward

Financing market price risk

Mitigants and considerations

Mitigant

Consideration

Support regime (FiT, CfD, SDE +, GC quota)

- Guaranteed price?
- Counterparty / buyer of last resort?
- Acceptable floor level (SDE+)
- Grandfathering

Contractual:

Long term PPA with certain degree of fixed price

- Counterparty credit strength / credit support
- Power and associated benefits?
- Full loan tenor covered?
- Replacement PPA obtained easily?
- Cost of PPA
- Claw back feature?

Financing market price risk

Mitigants and considerations

Mitigant	Consideration
Financing structure	<ul style="list-style-type: none">• Debt sizing criteria<ul style="list-style-type: none">• % split fixed and floating revenues• Split DSCR for fixed and floating cash flows• Base case Price path assumption• Resulting leverage lower with higher market price risk• Cash sweeps and/or reserves• Documentation requirements:<ul style="list-style-type: none">• i.e. PPA in place and pre agreed PPA replacement strategy• Subordination of part of opex
Market price sensitivity analysis	<ul style="list-style-type: none">• Very much market specific• Acceptable B/E price on banking case• Flat B/E or B/E price for each year?• Is there possibility to stretch tenor?

Market price risk in recent non-recourse financings

UK offshore

- Projects falling under the ROC regime
- PPA with utility offtakers
- No volume risk
- Downside price protection through floors, but a degree of market price risk remaining through sizing
- Up to ~35% of revenues variable
- Sizing DSCRs of [1.30]x (fixed) and [1.75-1.85x] (floating)
- Leverage up to ~70% feasible

Nordics

- Onshore wind
- Long term corporate offtakers
- No volume risk
- Long term PPAs fixing price for significant %
- Elcerts only locked in for short tenor
- Sizing DSCRs of [1.20]x (fixed) and step ups for variable revenues
- Resulting leverage up to ~60%
- Long term financing by limited universe of banks

Benelux

- Most Dutch transactions in the market to date have only limited market price risks included (below SDE+ floor) generally showing comfortable B/E price levels
- Merchant risk in Belgian transactions generally mitigated or absent

Zero bid context

PPAs

- In absence of subsidy, PPA becomes even more critical for developers/owners
- Different type of PPA counterparties likely willing and able to offer different offtake arrangements;
- Utilities deemed well positioned

Financing

- Germany zero bids have longer horizon
- Parties bidding in NL to date typically not apply non-recourse PF and majority have their own supply business
- For non-recourse PF some kind of cash flow fixing with PPA will be key
- Bring in long term investors
- Stable counterparty / counterparties will then be key

Considerations going forward

- PPAs
 - Utilities to play a leading role?
 - Further increase of corporate PPAs?
 - What is the depth of the overall PPA market?
 - Pooling of offtakers for purchasing power and increased credit standing?
- Regulation
 - Continued focus on build out of renewables; viable in zero bid context?
 - Emergence of capacity markets to support buildout of fossil fuel capacity in the medium to long term?
- Financing
 - a degree of fixing of cash flows with acceptable counterparties will be required
 - Debt sizing based on split DSCR levels (fixed / variable)
 - investors and lenders to take view on realistic bottom level for prices
 - Lower leverage for deals with higher degree of market price risk
 - Opportunity for other investors and lenders?



Selected credentials

[Annex]

Selected EMEA – Power & Renewables credentials



UK 09/17

GreenPower (Carraig Gheal)
GBP 74m
 Project Finance Facilities for the refinancing of a 46MW operational onshore wind farm in Scotland

Mandated Lead Arranger, Hedging Bank

Utilities/Power

Ireland 06/17

Powercon Wind Energy Ltd
EUR 40.1m
 Term Loan

Sole Arranger, Sole Lender & Sole Swap Arranger

Utilities/Power

Netherlands 03/17

Windpark Krammer B.V.
EUR 182m
 Project finance facilities for 102MW onshore wind farms

MLA, Hedging Bank, Account Bank, Facility agent

Utilities/Power

Netherlands 07/14

Westermeerwind
EUR 320m
 Term Loan for 144MW wind farm

MLA, Structuring/Hedging Bank & Underwriter

Utilities/Power



UK 08/17

Boreas (Investment) Ltd
GBP 450m
 Refinancing of CDPQ's 25% stake in the 630MW London Array offshore wind farm

MLA & Hedging Bank

Utilities/Power

Germany 04/17

Trianel Windkraftwerk Borkum II
EUR 625m
 Term Loan

Senior MLA & Senior Swap Arranger

Utilities/Power

UK 12/16

Race Bank Offshore Wind Farm
GBP 1.23bn
 Project Finance Facilities for the acquisition of a 50% stake in the 573MW offshore wind farm

Bookrunner, MLA & Hedging Bank

Utilities/Power

Belgium 10/16

Rentel Offshore Wind Farm
EUR 1.1bn
 Project Finance Facilities for 309MW offshore wind farm

MLA & Hedging Bank

Utilities/Power



UK 06/17

Vortex Solar UK
GBP 355m
 Project Finance Facilities for a 365MW solar PV portfolio

MLA & Hedging Bank

Utilities/Power

UK 07/16

Project Texas II
GBP 41m
 Project Finance Facilities for 46.3MW solar PV portfolio

Sole Lender, Hedging Bank, Account Bank

Utilities/Power

UK 07/16

Project Eclipse
GBP 300m
 Project Finance Facilities for the refinancing of acquisition of 32 solar farms across UK, with aggregate capacity of 344MW.

MLA, Hedging Bank

Utilities/Power

Italy 03/16

Eoxis Gioia I & II
EUR 44m
 Refinancing of 19.5MW operating solar portfolio in Italy

Sole MLA, Account Bank and Hedging Bank

Utilities & Power

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