Green Giraffe
The renewable energy financial advisors

Equity for near- and off- shore wind

Kromann Reumert event – Copenhagen – 4 June 2015

The renewable energy finance specialist

An unparalleled track record in successfully closing deals for our clients

More than **EUR 7 billion** funding raised for renewable energy projects in **5 years**

30 professionals with more than **160 years** of experience in offshore wind

Mandates in **13 countries**

Debt & equity advisor to the **EUR 3 billion** Gemini financing

Over **55 projects** with a capacity of more than **14 GW**

4 offices at your service

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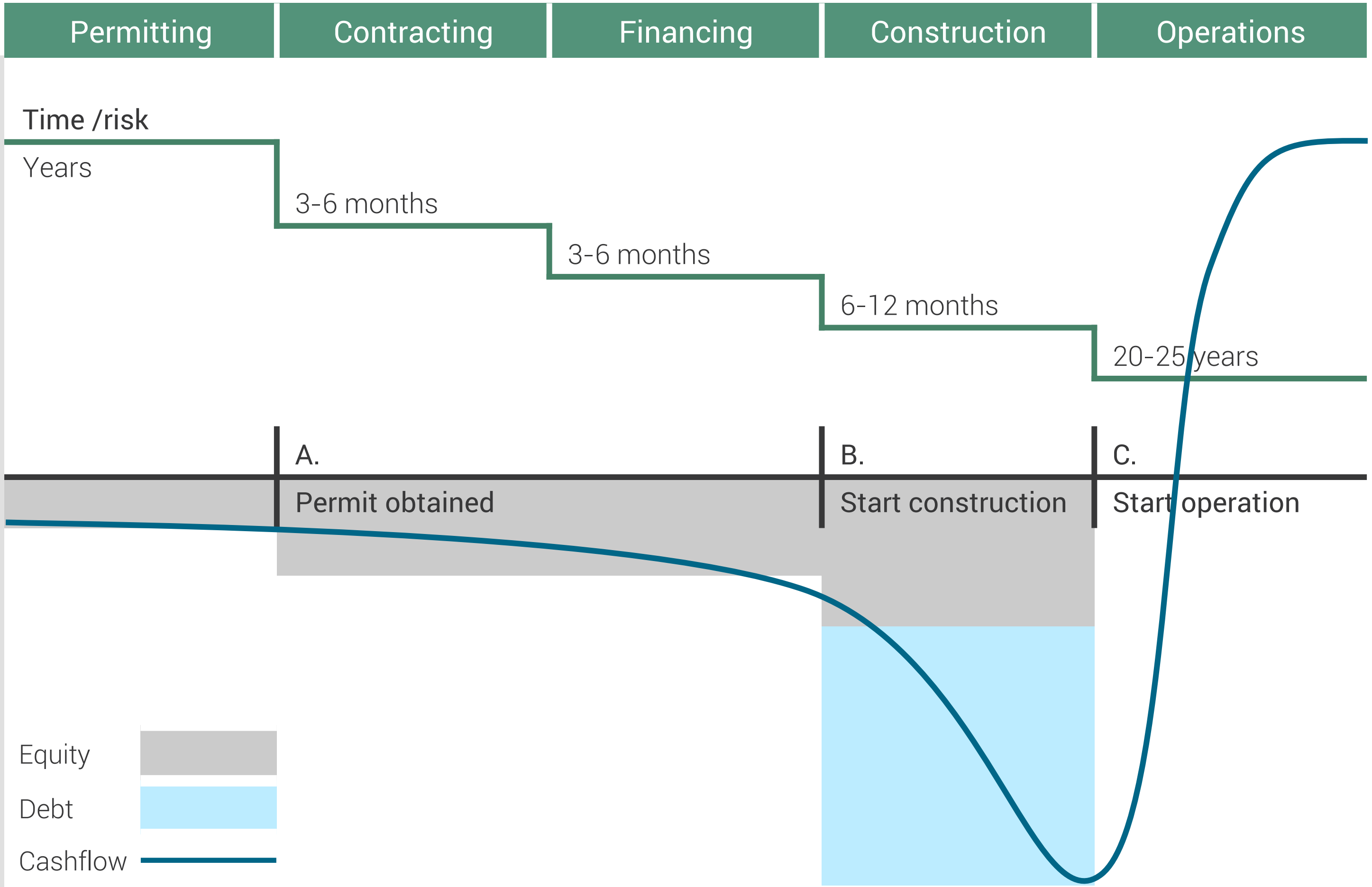
Value creation in wind projects

Most value is created during the development & contracting phases

- Renewable energy projects generally follow similar patterns of development
- Project risk/return profile transforms over time: a project “de-risks “ as key development milestones are realised (key permits, contracts, financing, construction, operation)
- Most investor appetite is for the construction or operational phases, not many investors are keen to take permitting or financing risk
- Most value is created in the contracting / financing phase as these parameters will largely determine project economics later



How projects are financed

“Balance sheet” (equity) vs “non-recourse” (debt)

Large projects are typically developed through a stand alone project company:

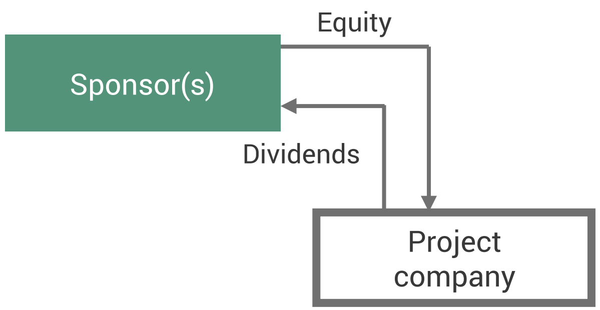
- Owned by the project investors
- With its own revenues & balance sheet and thus the ability to raise debt on its own merits

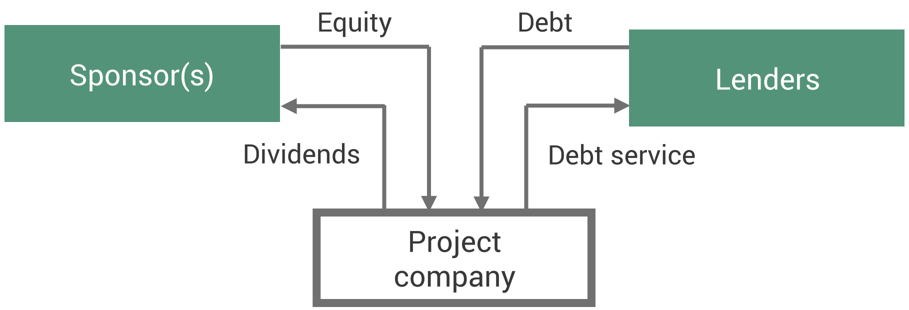
There are only two discrete sources of funding:

- By the owners (directly via equity or shareholder loans, or indirectly via guarantees)
- By banks without recourse to the equity investors – this is “project finance”

The way a project is funded will have a material impact on how it deals with contractors:

- In a project finance deal, you need to deal with the banks' requirements!
- Tax, accounting, consolidation and rating issues

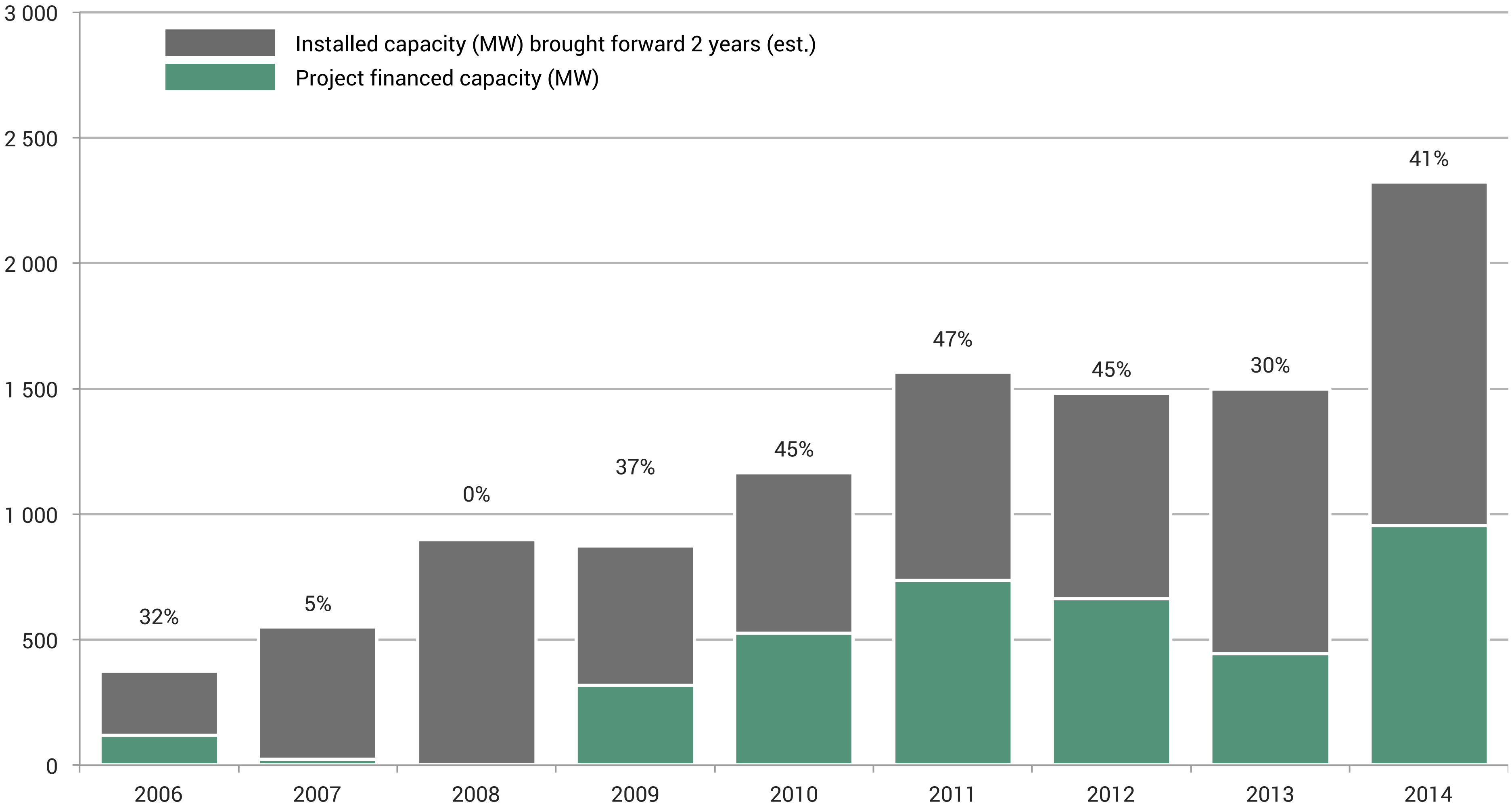




All parties have a direct incentive to understand who will be funding the project

The debt market

Project finance already finances a significant fraction of overall capacity



Equity strategies

The ratings issue

Rating agencies have a negative view on non-recourse debt

- They consider that utilities will not walk away from a strategic project and thus debt is not really non-recourse
- In countries where power is sold to the market, utilities which provide PPAs are considered to have a long term liability under the project and this is counted against them by ratings agencies (see below)
- Finally, certain utilities have covenants in their corporate credit facilities which prevent them from doing project finance if they control the project (and utilities typically prefer to control projects)

Imputed debt is a specific concern

- Related to fixed or floor prices under long term PPAs (beyond the 3 year forward curve)
- Rating agencies do not take liability caps into account in determining imputed debt
- Can bring significant liabilities on the offtaker's balance sheet, as rating agencies calculate the imputed debt as the NPV of future power payments at the floor price using the (typically low) average cost of unsecured debt as discount rate
- If utility sells majority of project but provides offtake under a PPA, it is thus "punished" by the rating agencies

The equity market

The waiting game seems over

A lot of recent regulatory changes

- Germany confirming the new EEG, FiT certainty until 2019
- EMR shaping up, although the "pot is smaller than expected, leading to lower growth perspective
- Contours of new SDE tender shaping up in the Netherlands
- Belgium and France also moving ahead

Most countries are converging towards the CfD model

- First projects banked in the Netherlands (Gemini) and Germany (Nordsee One) and soon in the UK (galloper)
- The key risk for lenders is the interface between the underlying wholesale price (PPA required) and the CfD
- The key risk for investors is the level of information on the site available at the time of the bid

The Danish model is viewed favourably

- Tariff for a fixed number of MWh offers good mitigation against wind risk
- Tender on the basis of comprehensive information package allows for competitive bids with lower contingency

The equity market

Some lessons

An active market – and a wider range of investors beyond utilities than people assume

- Infrastructure funds and pensions funds (PensionDanmark, PKA, Industries Pension, Marguerite, TCW, PGGM)
- Private equity groups (Blackstone)
- Corporations with specific strategies (LEGO, Colruyt)
- IPPs, sometimes part of a larger industrial group (Marubeni, Sumitomo, NPI, MHI)
- …. and many more sniffing around the sector

Valuations are actually relatively consistent

- Permitted projects – development cost + premium @ 200kEUR/MW
- Contracted projects – construction cost @ 3 MEUR/MW unlevered (or 1 MEUR/MW levered)
- Operational projects – linked to regulatory framework and IRR target of investors (7-9%)

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

Equity strategies

Investors and appetite for risk

Investor	Perm.	Dev.	Constr.	Ops.	Notes	PF?
Utility	Yes	Yes	Yes	Yes	A proven solution. Requires good cooperation to manage projects jointly as few are willing to take passive stakes. Many are "full"	Unlikely
IPP	Yes	Yes	Yes	Yes	Dominated by Japanese trading houses for now, some outsiders entering the scene (NPI), gradually stepping into construction risk	Yes
Private equity	Some	Some	Some	Yes	Require high returns and typically either involvement in dev. phase and/or aggressive long term assumptions. Control & exit are issues	Yes
Municipal utility	No	Maybe	Some	Yes	Have small but strong balance sheets. Can be part owners. Slow decision process. Stringent risk requirements. Required IRR is low	Probably
Sovereign wealth funds	No	Maybe	Some	Yes	Require simple contracting structure, long term O&M agreements and controlling partner. Masdar took on construction risk	Not necessarily
Infra funds	No	No	Maybe	Yes	A large universe of potentially interested parties. Most still require construction risk mitigation and long term O&M agreements	Probably
Corporations	No	No	Maybe	Yes	Invest to hedge power price risk or for strategic/marketing reasons. Happy (or require) to be minority shareholder strategic investor	Not necessarily
Pension funds	No	No	Maybe	Yes	Generally do not like construction risk. Some have shown interest to step in at FC (done on Butendiek). Need long term O&M agreements	Not necessarily
Contractors	No	Maybe	Yes	Yes	Are taking stakes or providing subordinated vendor loans to secure project pipeline. Often need a clear perspective on exit after COD	Not necessarily

Equity strategies

Current investment strategies

Strategy		Examples	
The pure developer	• Developers focus on initial permitting phase and sell the project before FID/FC • In offshore wind this already involves substantial costs (geotechnical studies)	• Ormonde (Eclipse) • Gode Wind (PNE Wind) • Butendiek (WPD)	
The utility model – from development to operations	• Utilities are involved throughout the value chain, from development to operations and keep full control • They can take the permitting risk but will often acquire projects once they are permitted • Up to now, they have mostly kept these projects on balance sheets, but may sell minority stakes	• NordSeeOst (RWE), • Walney (DONG, SSE) • Dudgeon (Statoil/Statkraft)	
The IPP model – with project finance	• A few non-utilities, including financial investors, are willing to take on development risk and construction risk • Such projects are almost always leveraged, both to raise the necessary funds and to increase returns • Transactions often involve “exits” at FC or at completion	• Meerwind (Blackstone), • Butendiek (wpd & investors) • C-Power (investor club) • Gemini (NPI)	Financial investors Project finance
Passive minority investments	• Minority stake behind a utility which remains in control and typically keeps the full construction risk	• Anholt (PensionDanmark) • Gunfleet Sands (Marubeni) • Rødsand 2 (SEAS-NVE)	Financial investors

Equity strategies

Emerging strategies

Strategy		Examples	
Large scale consortia	• Round 3 specific: very large development zones developed by consortium of utilities • Strategies to "slice and dice" zones still under consideration, but different tranches have been sold to different investors	• Dogger Bank (RWE, SSE, Statoil, Statkraft)	
Passive investment with construction risk	• Financial investors seeking higher returns are increasingly considering taking construction risk • This can be done via pure equity investments or through leveraged transactions	• London Array (Masdar), • Butendiek (4 investors)	Financial investors Project finance
Minority stake in assets with use of PF at holdco level	• Allows the majority owner (usually a utility) to keep full control of the project with limited external interference • Provides higher returns to investors and stronger minority rights (backup from banks)	• Gunfleet Sands (Marubeni) • Walney (Ampere/PGGM) • Westernmost Rough (GIB/ Marubeni)	Financial investors Project finance
Refinancing of operational assets	• Large brownfield market expected as operating parks >7 GW • Various strategies seem possible (majority/minority stakes, use of PF or not, portfolios vs single assets)	• Rhyl Flats (GIB, Greencoat) • Boreas (TCW + banks) • Baltic 1 (Stadtwerke + banks) • Rodsand (Eon)	Financial investors Project finance

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