



# Offtake considerations in today's RE world

Green Giraffe – Linklaters seminar – 16 October 2018

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# 1. Green Giraffe – The renewable energy finance specialist

## We get deals done

### Deep roots in renewable energy finance

- Launched in 2010 by experienced finance specialists with a **strong and proven track record** in renewable energy
- 70+ professionals with offices in Paris (France), Utrecht (the Netherlands), London (UK), Hamburg (Germany), and Cape Town (South Africa)
- Multi-disciplinary skillset including **project & structured finance, contract management, M&A, and legal** expertise



More than **EUR 20 billion** funding raised for renewable energy projects in **8 years**



**70+ professionals** in **5 countries**

### High-quality, specialised advisory services

- Focus on projects where we can actually add value
- We can provide a holistic approach and are able to include sector-specific tasks in addition to traditional debt or equity advisory (such as contracting, strategic advisory and development services)
- Widening geographical reach beyond Europe, with a burgeoning presence in the Americas, Africa, and Asia
- Priority given to **getting the deal done!**



Involved in over **120 renewable energy projects** with a total capacity of almost **30 GW**

# 1. Green Giraffe – Optimising offtake and financing

## Ensuring the PPA satisfies investors' requirements

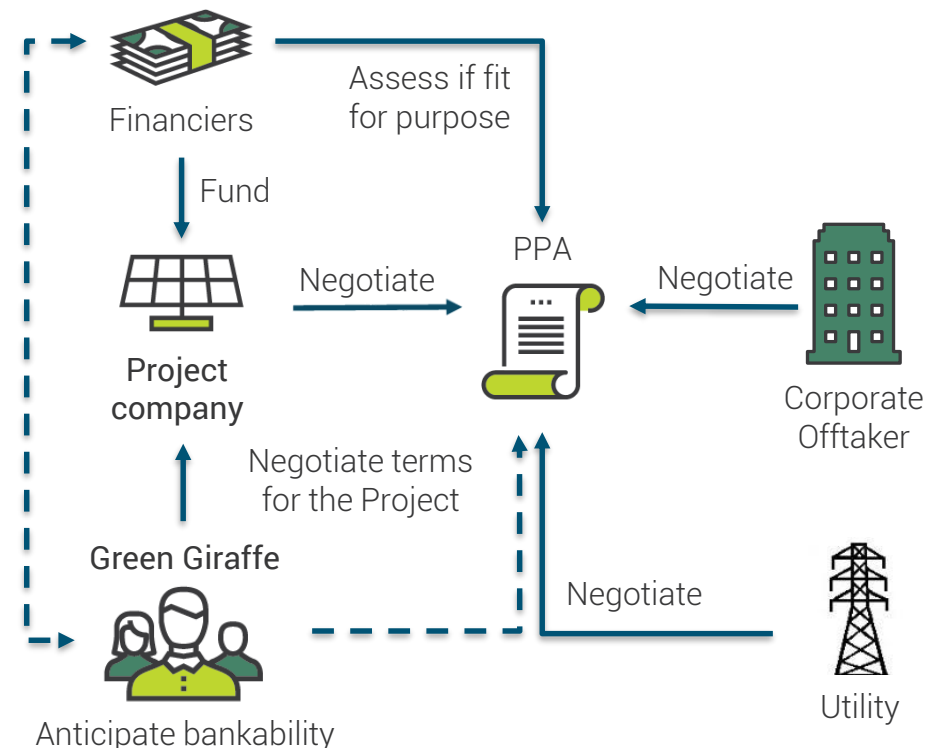
The PPA is the main structuring contract

Constraints brought by financiers are key

- Credit risk, PPA pricing and structure, balancing pricing, volume risk and duration of PPA are the major risks that investors and developers seek to pass down to the offtaker
- Termination events calibration allowing for reasonable remedy period and step-in rights
- With lenders funding the project, only second-ranking security is allowed for the offtaker requiring a security on the asset

Negotiating strong PPA terms with a highly rated private offtaker is an essential element to secure competitive financing

Green Giraffe's role – A structural overview



Green Giraffe's experience in negotiating robust PPA contracts helps tailor PPA terms and accurately structure the project financing

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## 2. Electricity purchase – Recent trends

Appetite for private PPAs depends on the regulatory framework

| Support scheme     | Examples   | Existing corporate PPAs           | Corporate PPA potential | Comments  |
|--------------------|--|-----------------------------------|-------------------------|---|
| No tariff support  | UK (onshore/PV), Ireland<br>Italy (more and more)<br>Spain (limited support) | UK<br>Spain<br>US                 | High                    | PPAs needed   |
| Green certificates | Norway<br>Sweden<br>Belgium (old)  | Norway<br>Sweden                  | High                    | PPAs needed (including the green certificates or not depending on the jurisdiction) |
| CfD with floor     | Netherlands<br>Finland (transitioning)<br>Denmark                            | Netherlands<br>Finland<br>Denmark | Medium – High           | PPA valuable for<br>(i) Cap and floor structure<br>(ii) Auction won at EUR 0 CfD    |
| CfD no floor       | Germany<br>UK offshore<br>France offshore                                    | Germany (on-site only)            | Low – Medium            | Limited interest for structured PPA, but rather for long term routes to market      |
| Feed-in tariff     | Luxemburg<br>Ireland (closing)<br>France                                     | No                                | Low                     | PPAs de facto negotiated with public entity or grid operator                        |

## 2. Electricity purchase – Recent trends

### Offtakers in Europe

Three types of offtakers could be interested in this portfolio

| Offtakers           | Characteristics   |
|---------------------|---|
| Utilities           | <ul style="list-style-type: none"><li>• Utilities are the best equipped parties to take the long term offtake risks as they have direct access to the end-users</li><li>• However, PPAs beyond 10-12 years are difficult to strike due to uncertainty on the long term electricity prices</li></ul>   |
| Aggregators         | <ul style="list-style-type: none"><li>• Aggregators are entering the market</li><li>• They offer a new solution to balancing by combining storage, production from local sources and demand-side response</li></ul>   |
| Corporate offtakers | <ul style="list-style-type: none"><li>• Have goals to reduce carbon emissions as part of their sustainable strategy</li><li>• Corporates are more inclined to long term PPAs</li><li>• More and more companies are becoming active in the sector (e.g. Google)</li><li>• There are various recent examples in the US and the first ones are now seen in Europe, mainly in the Nordics</li></ul> |

### PPAs are essential for bankability

Defining a PPA strategy is a balancing act between maximizing shareholder value while creating an acceptable risk profile for both banks and shareholders of the project

- Allocating risks to other parties through the contractual structure can be costly but still have a positive impact on the sponsor's return when it allows cheap financing from the banking market
- For the offtake risk, banks used to require full fixed price PPAs in order to mitigate price risk
- Some start to test more flexibility on the offtake contract

### Merchant risk can be taken by banks

- They don't like it, but can tolerate a slice of merchant risk
- The risk is dealt with through conservative assumptions (typically low/central scenarios) and higher debt service coverage ratios
- Banks will prefer to have a portion of the revenues at a fixed price, and/or some form of hedging in the early years at least

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# 3. Offtake agreements and corporate PPAs

## Different scenarios are possible, each having its own challenges

### Combining a PPA and CfD

- A PPA could come as a complement to the CfD to protect the project from downside scenarios
- Potential upside scenarios
- Optimised structure with both CfD and a PPA can decrease risks and increase the project's valuation

### Relying solely on a corporate PPA

- Corporate PPAs allow both generators and corporates to address their individual circumstances and risks
- Corporates having a significant energy consumption are able to commit to long term PPAs
- Having the offtaker bear a slice of the price, volume and balancing risk reduces the volatility of the project's cashflows and thus attract cheaper capital
- Without a CfD, valuation can be enhanced by having a corporate PPA

### Relying on a standard PPA

- PPAs are available for all technology types, renewables and conventional alike
- PPAs vary according to the power plant technology, regulatory frameworks, physical infrastructure as well as offtaker's and generator's needs
- The power plant can provide generated electricity, availability depending on technology (e.g. pump storage facilities, gas power) and other outputs such as carbon credits or renewable energy certificates
- Offtakers are usually utilities but sometimes traders, or financial parties. These are unlikely to commit to long term agreements, which makes it more difficult to raise cheap capital
- Although more difficult for securing the financing, they are nothing new – more than 95% of newly built power plants are in fact financed on the back of a PPA

## Choosing the best offtake solution is key to maximise the value of a project

# 3. Offtake agreements and corporate PPAs

## Corporate PPA – matching the expectations of interested parties

### Generator goals

- Long term and predictable offtake price and volume
- New market development & diversification

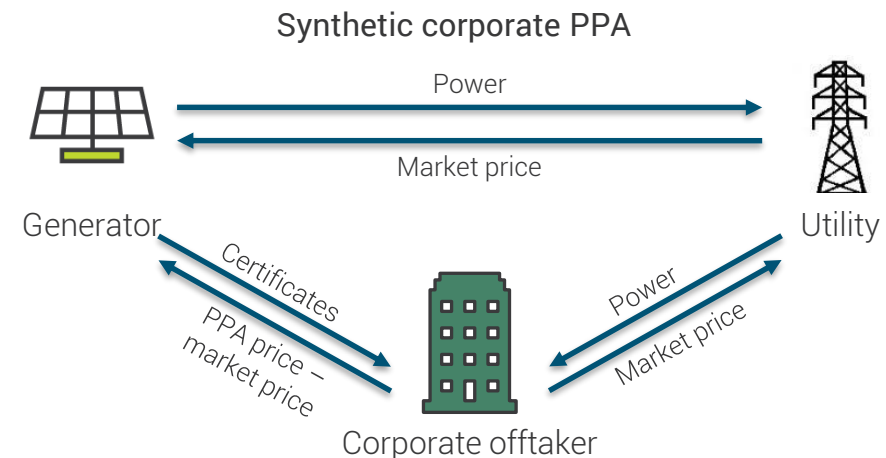
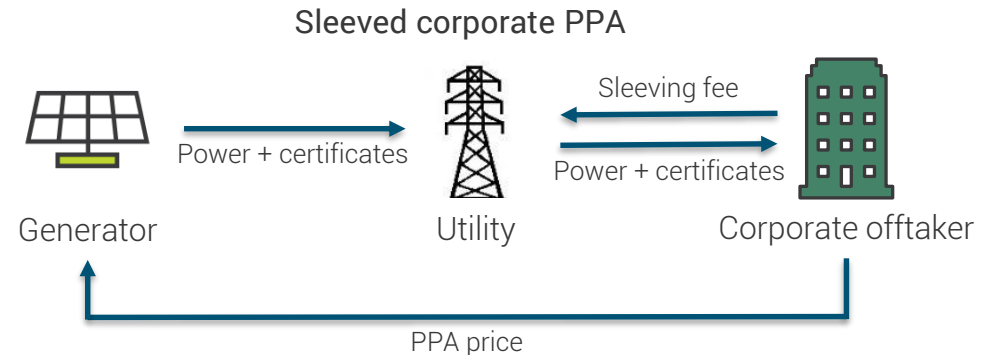
### Corporate offtaker goals

- Environmental: reduce carbon emissions as part of a sustainability strategy
- Economic: long term hedging

### Utility/licensed party involvement

- Required to meet regulatory constraints
- Able to take on some risks

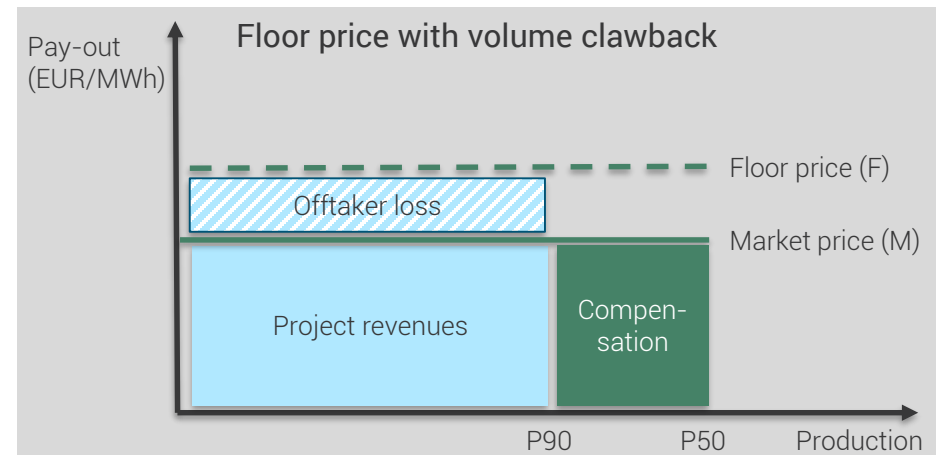
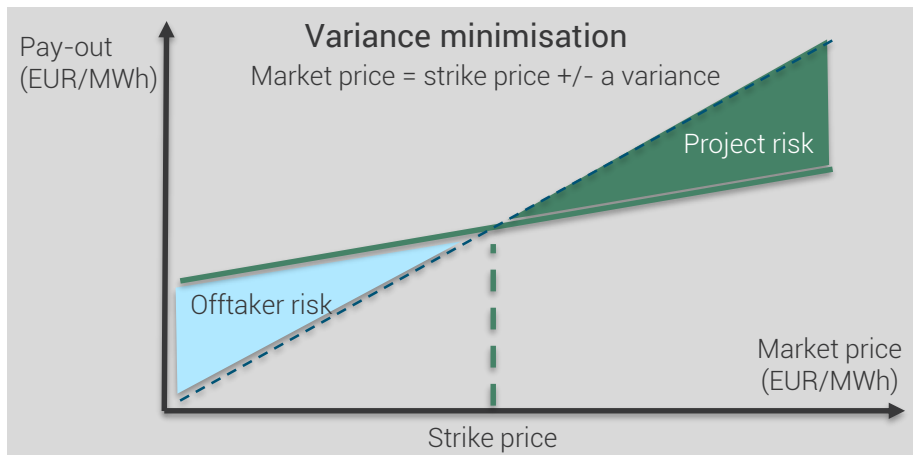
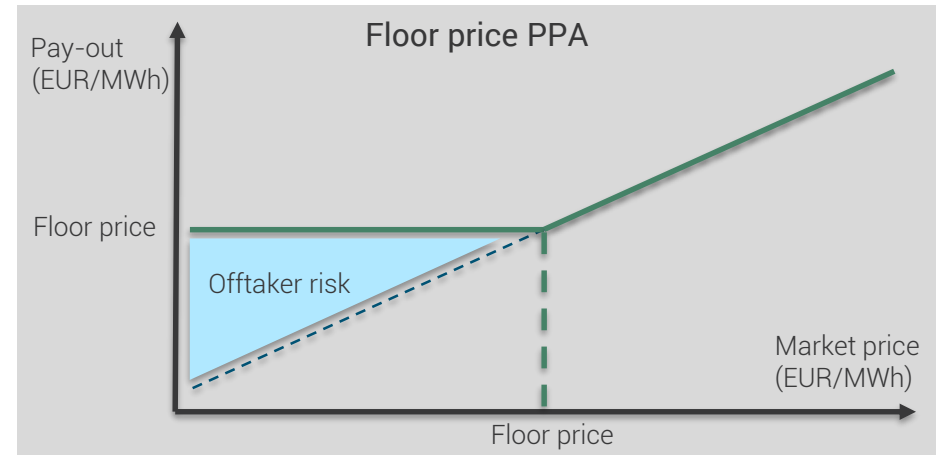
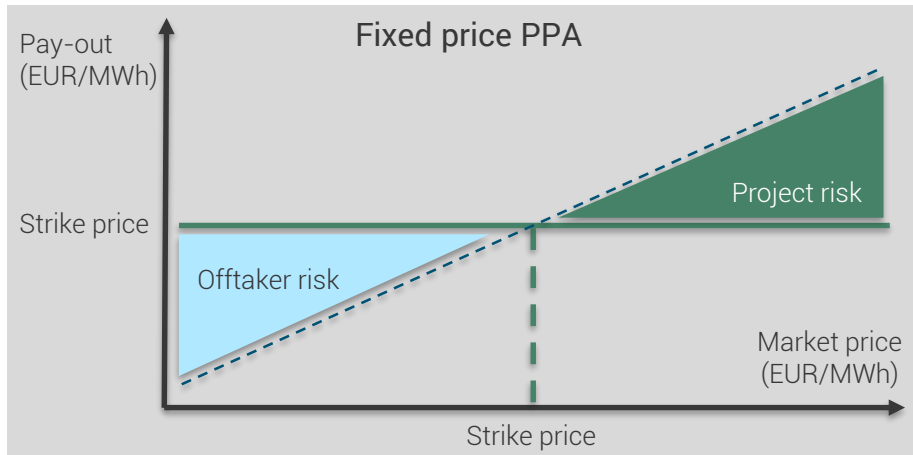
Two types of contractual structures can be used to reach these goals



No standardisation of corporate PPAs yet but several options tested

# 3. Offtake agreements and corporate PPAs

## Corporate PPA – possible pricing structures



We can structure the right pricing mechanism out of a range of possibilities

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# 4. Conclusion

## Corporate PPAs offer a new option in a dynamic offtake universe

### PPAs are not new in the renewable energy sector

- Offtake agreements have been crucial for many years, in particular in the countries using green certificate mechanisms
- Large European utilities have led this market in Europe
- Corporates have been very active in the US, contracting directly offtake agreements with the developers

### A changing context puts a new focus to structured PPAs

- Old feed-in tariff schemes have moved to CfDs framework
- Renewable energy projects are becoming cost competitive in several countries
- Large corporates want to source their electricity needs from renewable energy sources for ethical reasons

### Several offtake structures are available

- The European market will still be dominated by utilities in the coming years
- Other players, aggregators and traders are making the electricity market more fluid
- Corporate PPAs offer a new option, which can be closer to a utility PPA (sleeved PPA) or to a finance hedge (synthetic PPA)

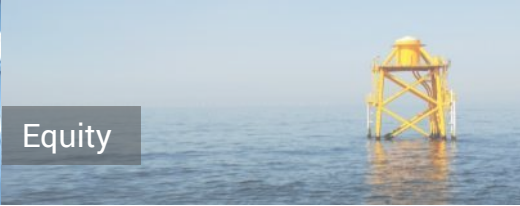
Optimising the offtake and the finance structures together is advisable to go beyond the zero-sum game

## Discussion opened to the panel to dive into these key concepts





Debt



Equity



Strategic



Contracting



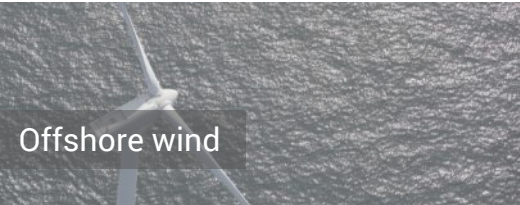
**Green Giraffe**

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Offshore wind



Onshore wind



Solar power



Other renewables