

The British Corporate Renewable PPA Market: Regulatory Framework

Lee Donovan
Energy Associate



Norton Rose Fulbright | Law around the world

Recognition

Law360 Global 20 list

Portfolio Media Inc 2015-2018

Top 25 global elite

Global Competition Review 2015-2018

Top 5 global elite brand leader

*Acritas Sharplegal, Global Elite Brand Index
2015-2018*

Top 15

BTT's peak performing law firm list 2013-2018

Leading law firm for cross-border
restructuring and insolvency

Global Restructuring Review 2018

Capital markets law firm of the year

Islamic Finance News Law awards 2018

Investigations team of the year

Transatlantic Legal awards 2018

Cyber law firm of the year

*The Insurance Insider Cyber Ranking awards
2018*

Best place to work for LGBT equality

*Human Rights Campaign Foundation's Corporate
Equality Index 2018*

Regulatory and investigations team
of the year

Legal Week's British Legal awards 2018



People worldwide

7000+

Legal staff worldwide

4000+

Offices

50+

Key industry strengths

Financial institutions

Energy

Infrastructure, mining
and commodities

Transport

Technology and innovation

Life sciences and healthcare

IJ Global and PFI Awards 2018

American Solar Deal of the Year East Green Power Solar

Achieved East Green Power S.p.A. (EGP), an sponsor, and three project companies as borrowers on a US\$600m loan secured against a portfolio of solar PV plants in Mexico comprised of Villavieja 1 and II and Don Jose (220MW).

Offices: Milan and Mexico City

Project Finance International (PFI) 2018

IJGlobal 2018

Asia Pacific Clean Energy Deal of the Year Kwinana Waste to Energy plant

Achieved Dutch Infrastructure Fund (DIF) as the acquisition of a majority interest in the Kwinana waste to energy plant in Western Australia. The Kwinana plant will be the first commercial-scale and project focused waste to energy facility constructed in Australia.

Offices: Melbourne and Sydney

Project Finance International (PFI) 2018

IJGlobal 2018

Asia Pacific Infrastructure Deal of the Year WestConnex

Achieved successful joint venture amongst of Landstar, Sunning and Bouygues, in connection with Stage 1A of the WestConnex project in Sydney, Australia. The project is the largest toll road infrastructure project to ever be attempted in Asia-Pacific, and will provide 31km of motorway.

Offices: Sydney

Project Finance International (PFI) 2018

IJGlobal 2018

Asia Pacific Solar Deal of the Year Sonnaysia Solar Farm

Achieved the sponsor, Monong Australia, on all aspects of the development, construction, equity sale and debt financing of the 215MW, Sonnaysia Solar Farm, near Bulahdelah in Southern NSW.

Offices: Sydney

Project Finance International (PFI) 2018

IJGlobal 2018

Asia Pacific Biomass Deal of the Year Golf Chana Green

Achieved lenders in relation to the development and construction of a 25MW Chana Green biomass power project located in Rajabhat, Chana District, Songkhro Province in Thailand. The Project is developed by Golf Chana Green Company Limited, a wholly-owned subsidiary of Golf Energy Development Public Company Limited (GED), a power generation company headquartered in Thailand.

Offices: Bangkok

Project Finance International (PFI) 2018

IJGlobal 2018

Latin America Upstream Oil and Gas Deal of the Year Sepia 3500

Latin America Upstream OMC Deal of the Year - Sepia 3500 PFD. Newton Rose Fulbright advised lenders and the Jagan Bank for International Cooperation on the long-term project financing of an PFD vessel operated by MUREC, a wholly-owned subsidiary of Gulf Energy Development Public Company Limited (GED), a power generation company headquartered in Thailand.

Offices: Tokyo

Project Finance International (PFI) 2018

IJGlobal 2018

Europe Transport Deal of the Year Hankenburg Tunnel

Achieved the sponsor, construction consortium comprising DBF, Mueser Rutledge and Baker Nadelman, one of the largest and most complex PPPs, combining elaborate technical solutions and financial engineering to complete a mining section of Rotterdam's road system.

Offices: Amsterdam

Project Finance International (PFI) 2018

IJGlobal 2018

Middle East and Africa African Programme of Year REIPPF 4

Achieved East, through the subsidiary East Green Power S.p.A. (EGP S.p.A.), on the construction financing facilities for a portfolio of five wind projects in South Africa. The portfolio includes approximately 700MW of capacity at an estimated value of approximately \$500m.

Offices: Milan and Johannesburg

Project Finance International (PFI) 2018

IJGlobal 2018

Middle East and North Africa Transport Deal of the Year Queen Alia acquisition

Achieved the International Finance Corporation (IFC) and Islamic Development Bank in relation to the restructuring of the shareholding of Airport Group International P.L.C. and certain assets relating to the extension of the baggage handling system and the upgrading of the field baggage screening at Queen Alia International Airport, Jordan (the EBES Works) following the original USA7m financing.

Offices: London

Project Finance International (PFI) 2018

IJGlobal 2018

North America Oil & Gas Deal of the Year Corpus Christi LNG Train 3

Achieved a syndicate of lenders (comprised of 60 commercial banks) and other financial institutions from North America, Europe and Asia who agreed to a US\$1.6bn debt financing for the expansion of Corpus Christi LNG, which will provide a portion of the funding necessary to pay for construction of a third LNG train at the Corpus Christi port.

Offices: Washington DC

Project Finance International (PFI) 2018

IJGlobal 2018

Adding value through our industry knowledge

Norton
Rose
Fulbright

Providing strength and depth from our global footprint



North America Rail Deal of the Year Finch West LRT

Achieved Metrolinx and Infrastructure Ontario on the C2L Finch West LRT project. The project comprises 11km of light rail transit and includes the construction of 16 surface and 1 below-grade stations, as well as a maintenance and storage facility for light rail vehicles. The project is in accordance with Infrastructure Ontario's Design-Build-Finance-Maintain (DBFM) approach with a 10-year construction period.

Offices: Toronto

IJGlobal 2018

North America Power Deal of the Year South Field

Achieved CIT Energy Financial Services, Credit Agricole and CIT Bank as senior lenders to South Field Energy LLC in a US\$1.1bn construction financing for an 1,125MW combined-cycle natural gas-fired power project in Ohio.

Offices: New York

IJGlobal 2018

European Ports Deal of the Year Rotterdam World Gateway

Achieved the sponsor in the due diligence for the restructuring of the Rotterdam World Gateway, a container terminal that reached financial close in June 2012.

Offices: Amsterdam

IJGlobal 2018

Europe Offshore Wind Deal of the Year Cibola 1 (Tesla) Wind Farm

Achieved IFC and European Bank for Reconstruction and Development (EBRD) in relation to the €211m debt financing to Wind Energy Reforest Group (WERF) for the construction, commissioning and operation of the 150MW Cibola 1 wind farm in the north east of the Republic of Ireland.

Offices: London

IJGlobal 2018

Latin America Refinancing Deal of the Year Aibo Maipo

Achieved the senior lenders including Inter-American Development Bank (IDB), Banco de Chile, Swisscom S.A., Banco del Estado de Chile, Itaú Capital, UBS Bank, ASB and Deutsche Bank, in the second US\$3 billion refinancing of the 511MW Aibo Maipo hydroelectric power project in Chile.

Offices: Washington DC

IJGlobal 2018

Latin America Mining Deal of the Year – Huata Norte

Achieved Lend Lease Gold on the closing of the US\$350m senior secured project finance debt facility, used to fund the close to US\$1 billion development and construction of the Huata Norte gold project in Ecuador. This is phase 2 of the US\$650 million debt financing package for the Project. The financing involved commitments from international commercial lenders with a portion funded by the Finnish Export Credit Agency (Finlex).

Offices: Ottawa

IJGlobal 2018

Africa Biomass Deal of the Year Ngodwana Energy Business

Achieved Sappi Southern Africa, a multi-lending pulp and paper company with global operations, on the successful closing of the financing, construction and operations of a 240MW, 15 MW biomass power plant developed by independent power producer, Ngodwana Energy. This project, one of only a limited number of biomass power plants to be developed under the IJGPP, will contribute significantly to the increased sustainability of local renewable energy, jobs and socio-economic development.

Offices: Johannesburg

IJGlobal 2018

Africa Mining & Metals Deal of the Year Pangaea metal purchase with Lemin

Achieved Pangaea Investment Management, an associate of the Chinese copper giant Jiangxi Copper, on US\$200m platinum metal purchase transaction with the Lemin group.

Offices: Johannesburg

IJGlobal 2018

Africa Solar Deal of the Year Almo Akiko

Achieved the lenders on the financing of a 50MW solar PV project developed by Almo in Kira, Mali. This will become the largest solar farm in Western Africa.

Offices: Paris

IJGlobal 2018

Africa Wind Deal of the Year Taiba N'Diaye

Achieved the sponsor, French developer Eustade and London-headquartered renewable energy company Lohas, on the project financing of a 1,500MW wind power project located in Taiba N'Diaye, Senegal.

Offices: Paris

IJGlobal 2018

Africa Fundraising Deal of the Year Emerging Africa Infrastructure Fund (EAFIF)

Achieved longstanding client, EAFIF, in relation to its latest round of debt fundraising, in which EAFIF raised approximately US\$350m in new long-term debt capital to invest in sub-Saharan African infrastructure projects.

Offices: London

IJGlobal 2018

Corporate PPAs – a global experience base



Europe

- UK - Advised on over 900MW of corporate PPAs in the UK (measured by capacity), including buyers (Nestle, HSBC, Bloomberg, JG Pears, Tata Steel, UK Government Procurement Service, DP World), sellers (Orsted and project companies for dedicated sales to Bombardier, GSK and various Local Authorities) and lenders/investors
- UK – developed energy as a service model for combined corporate solar offtake with battery for firming
- Netherlands - advised sponsor of Krammer wind project in the Netherlands, including long term PPA with a consortia of AkzoNobel, DSM, Google and Philips
- Netherlands - Developed template corporate PPA template for global utility to use as base for offshore wind tender to buyers
- Norway - advised Luxcara in relation to financings of Norwegian wind farms with corporate PPA with Facebook entity
- Finland - advising on three baseload subsidy free long term corporate PPAs with a Finnish offtakers. We have developed the PPA model, as well as associated trading agreements to manage the conversion of the output to a baseload shape
- Norway - Conducted a bankability assessment for potential lenders of the corporate PPA for a 650MW project that entered into a 20 year baseload PPA with Norsk Hydro
- Spain - Advised an international developer on a proposed baseload delivery structured CPPA for the Spanish market (offtaker an aggregation vehicle for Spanish buyers)

Middle East and Africa

- advising Infinity Solar on the development of a model form of PPA for wheeling and behind-the-meter power projects in Egypt;
- advising Shell on a corporate PPA for a solar PV project in Oman, selling power to a large industrial consumer at Sohar;
- advising Impala Energy on the development of a model power purchase agreement for behind the meter solar PV power projects across east Africa;
- advising a DFI on the financing of a 35MW, 500 site portfolio of rooftop solar PV projects in the West Bank, selling power to local distribution companies on a net billing basis;



Australia

- Allianz and Nephila Climate – advising on first solar proxy-revenue swaps globally for the Susan River, Childers and Nevertire solar farms and first Australian wind proxy-revenue swaps with Visy and Orora for the Lal Lal wind farm and subsequent PRS model offtakes (ongoing).
- Snowy Hydro – advising Snowy on its procurement of 400-800MW of renewable energy generation (ongoing) Westpac corporate PPA.
- Zen PPAs – Advising Wirsol on its PPAs with Zen Energy for its Wemen and Clermont solar projects, including the adoption of innovative and “first-of-kind” contract structuring to enable integration of intermediary, reallocation and CfD mechanics for bankability and stakeholder flexibility.
- UNSW – Advising UNSW on its strategy for carbon neutrality and ultimate tender for the large scale solar PV corporate PPA

procurement for up to 93GWh of power from renewable energy projects; the first University globally to achieve 100% carbon neutrality through a corporate PPA.

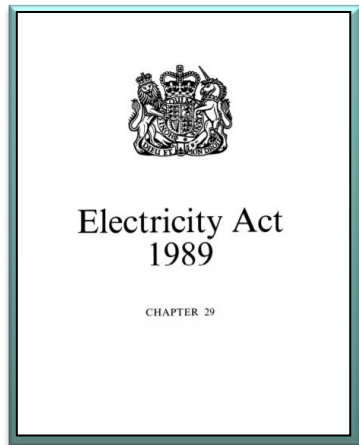
USA

- Wasatch Wind. Represented Wasatch Wind in the negotiations of a 60 MW wind project PPA with PacifiCorp in Utah and an 80 MW wind project PPA with PacifiCorp in Wyoming.
- Westar Energy. Represented Westar Energy as off-taker in the negotiation of PPAs for several wind energy projects in Kansas.
- Solar + Storage Project in Massachusetts (Origis Energy). Represented the developer in drafting and negotiating the power purchase agreement and interconnection agreement with municipal purchaser for the first community solar combined with battery energy storage in Massachusetts.
- Solar Project in ERCOT (confidential). Representing the

developer of a proposed 60 MW+ solar generating facility in Texas. Drafting and negotiating virtual power purchase agreements and renewable energy attribute contracts with large corporate consumers and drafting shared facility agreements for the shared use of interconnection facilities.

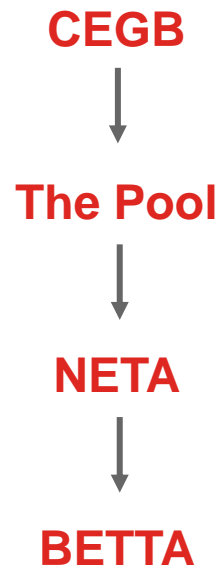
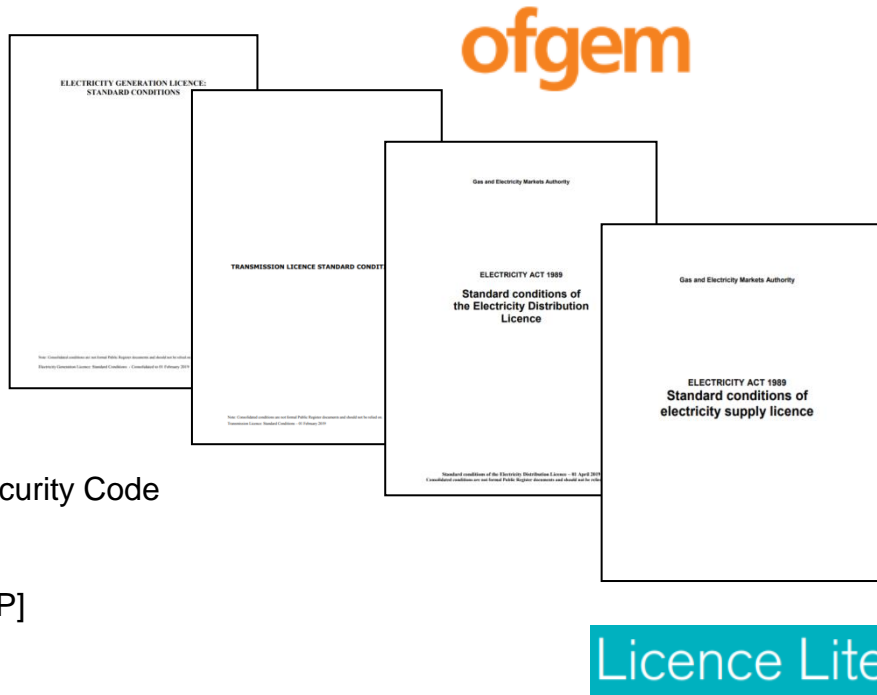
- Solar + Storage Project in Arizona (confidential). Represent developer of 20 MW solar + 17 MW/ 60 MWh battery energy storage system in drafting and negotiating a physical power purchase agreement with the local utility.
- BayWa Renewables. Represented BayWa Renewables in the negotiation of virtual PPAs for 6 corporate offtakers from a 100 MW solar project in PJM market.
- Developed innovative solutions such as the Proxy Revenue Swap structure for Allianz, which involved Microsoft as the cornerstone price hedge.

GB electricity regulatory landscape

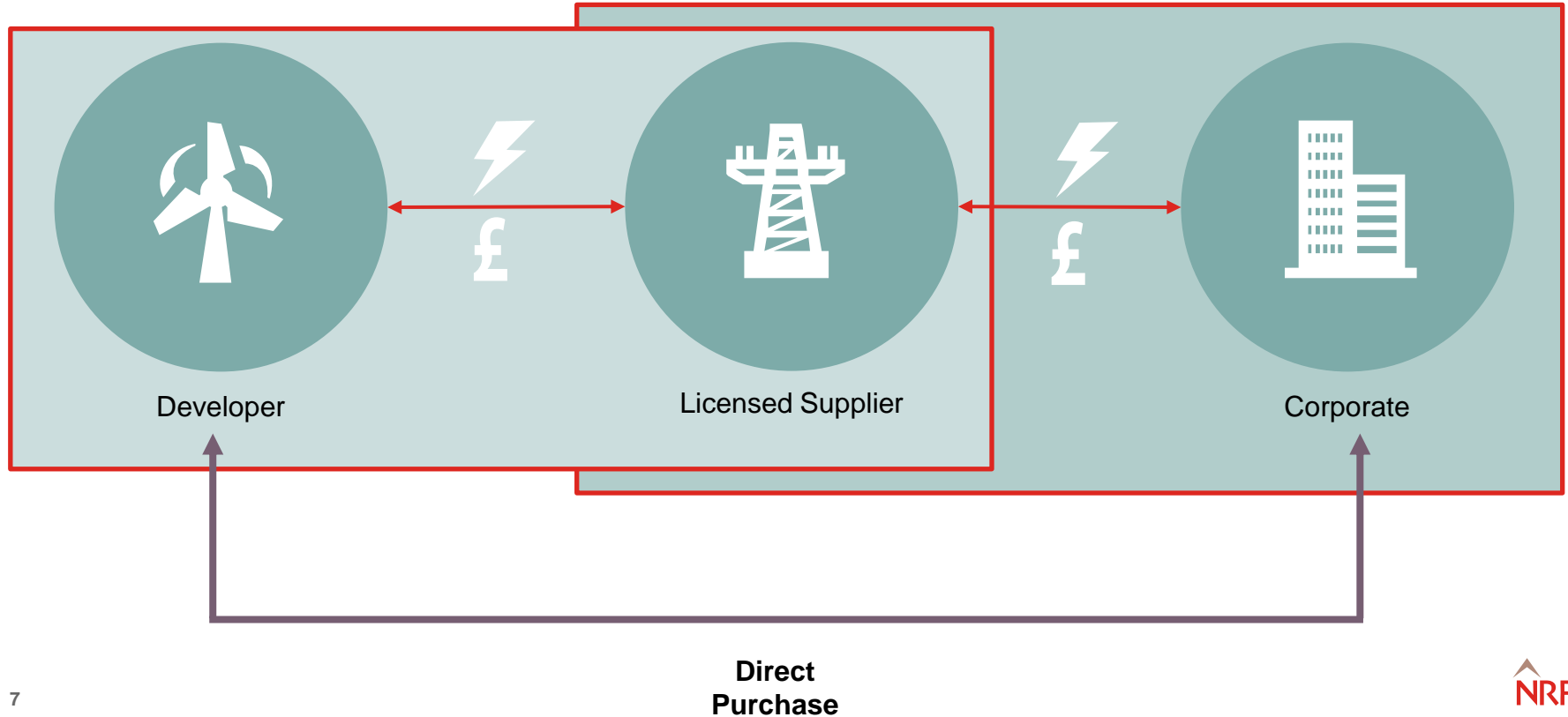


Industry Codes

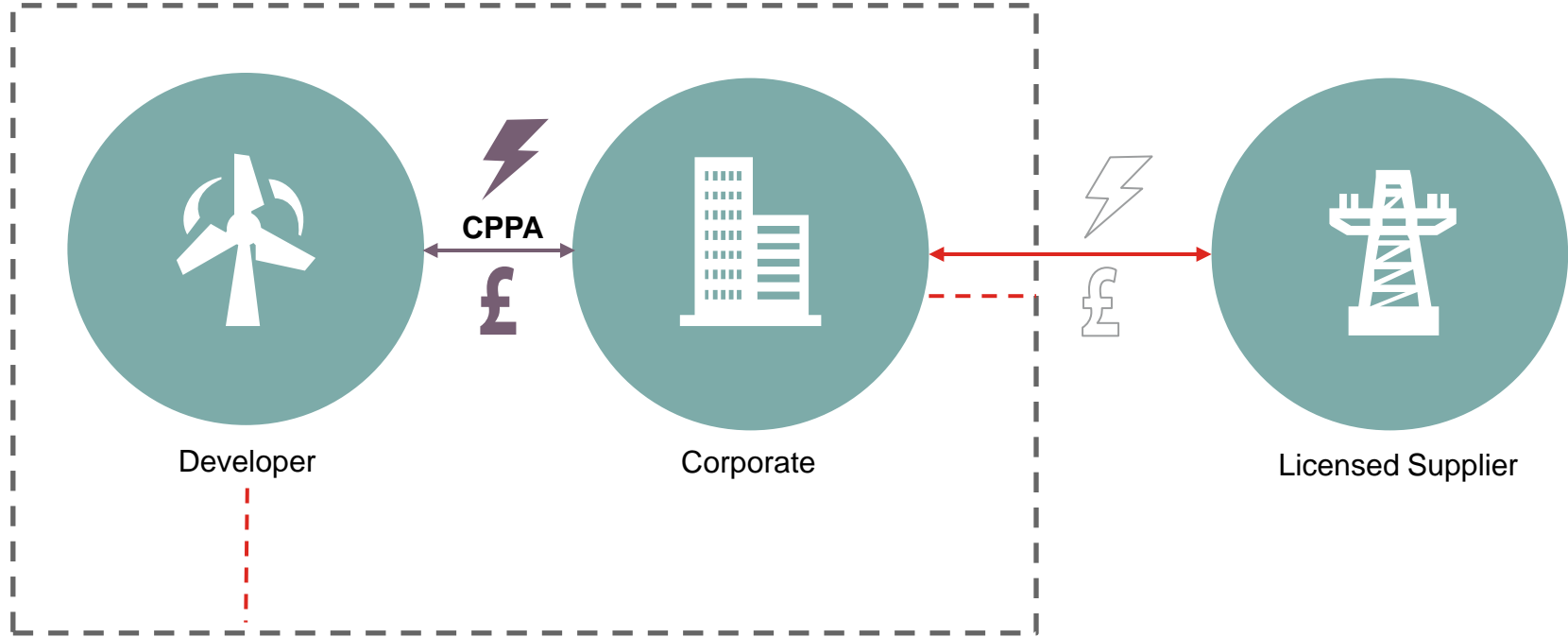
- BSC
- CUSC
- DCode
- Grid Code
- MRA
- DCUSA
- Fuel Security Code
- SEC
- [REC]
- [SMICoP]
- [GDDA]



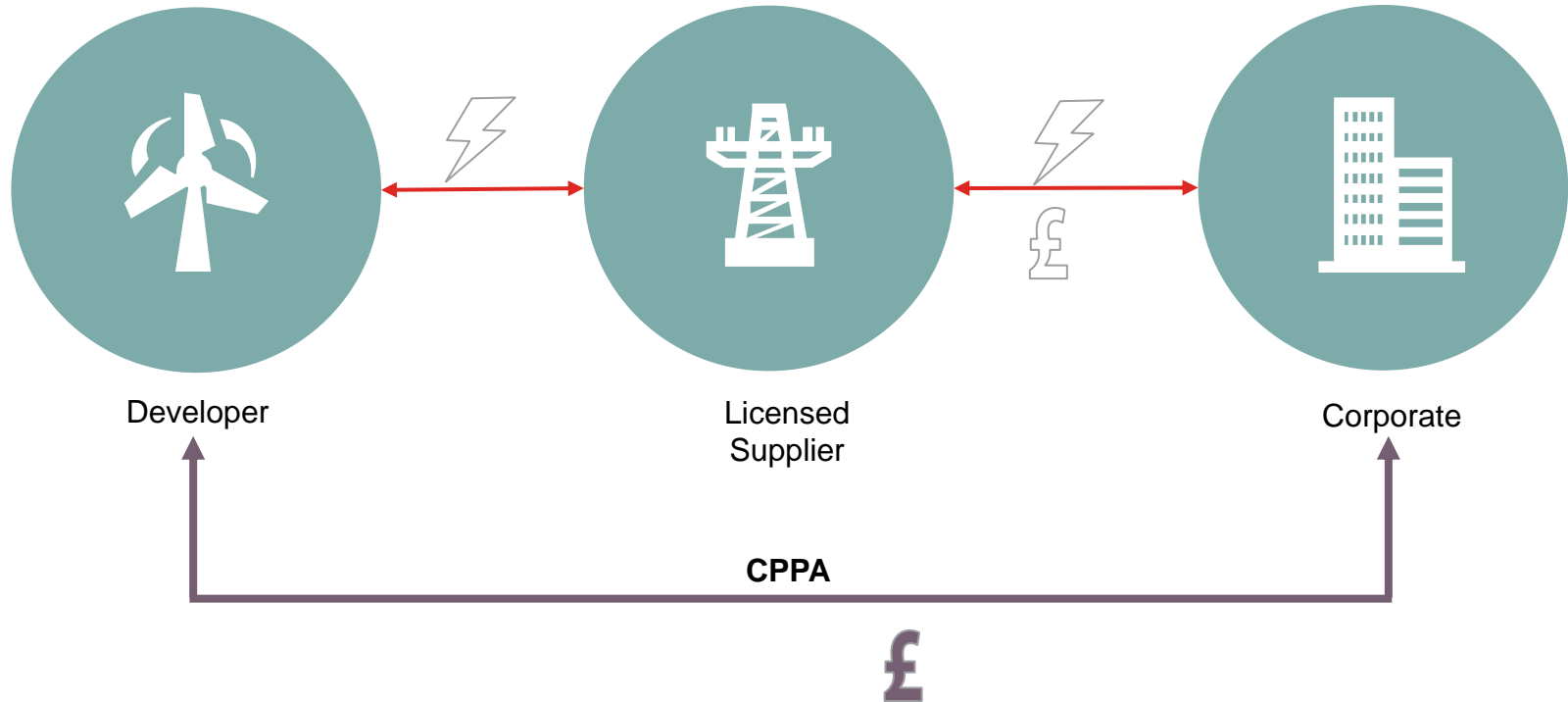
A “Corporate PPA” in GB



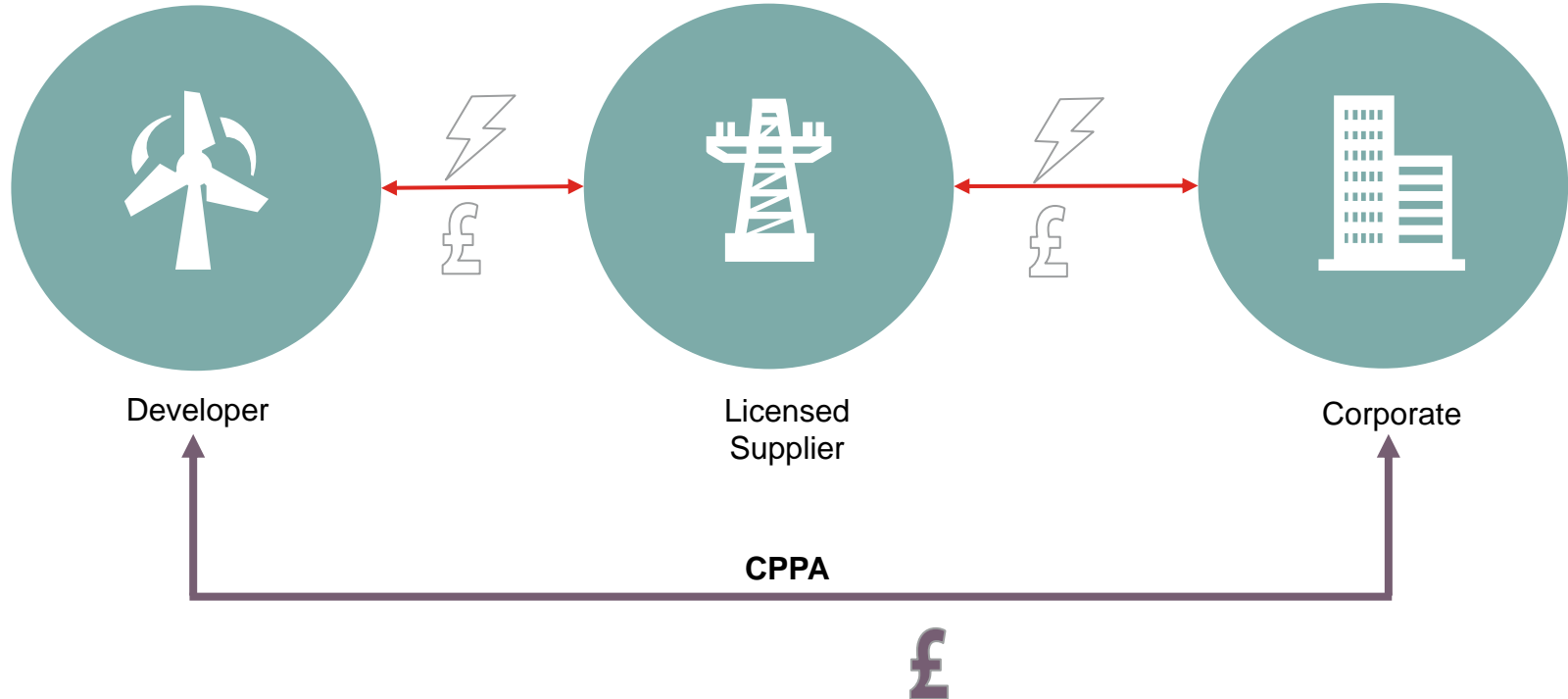
1. Off-grid PPA



2. Physical PPA



3. Virtual PPA



Challenges (and solutions)



Complexities

- New arrangements for many Corporate buyers (non-core to business, accounting treatment, etc.)
- Lack of contract standardisation



Volume and shape risk

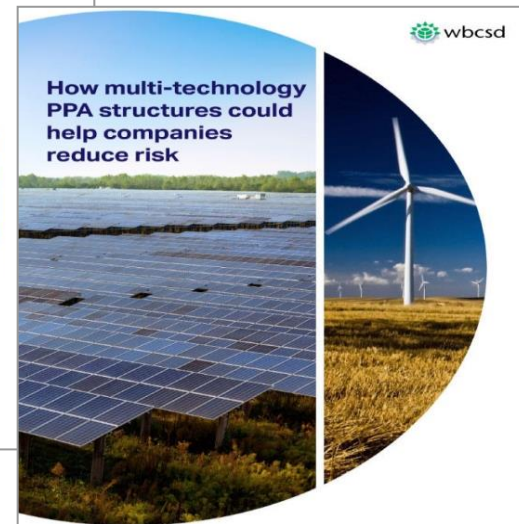
- Contractual solutions
- Physical solutions



Contractual risk allocation

- CPPA as revenue stream/route to market
- “Bankability” issues vs. Corporate requirements

Further reading



Thank you



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Law around the world

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