lightsource bp

Power purchase agreements: Direct action, greener outcomes?

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Introduction to Lightsource bp

Leading the solar revolution today

Lightsource bp has been instrumental in accelerating the growth of solar as an energy source worldwide. Our financial expertize and track record has allowed us to grow exponentially since inception, and our resources and backing give us the reach to continue to do so.

Highlights today:





countries





Power Purchase Agreements (PPAs) signed since 2017



500+

team members

...and tomorrow

Pillars of our 2023 ambition:



Recruit and retain the best global talent



Control large portfolios of utility scale solar assets across our strategic markets



Maintain our reputation as industry-leader in safety & integrity



A global platform with local impact

We are a footprint aligned organisation and our operations expand across EMEA, APAC and the Americas. These markets feature strong fundamentals to deploy solar and capital at scale.

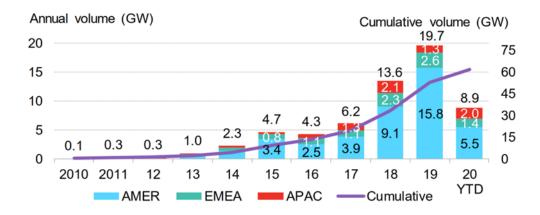


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Developing market for Corporate PPAs

Global corporate PPA volumes, by region



- Global corporate PPA volumes reached 8.9GW in 2020
- Europe has also had a promising start to the year, with PPAs totalling 1.4GW signed in nine different markets
- Markets that have picked up include Brazil, with 860MW deals announced

Source: BloombergNEF Note: Onsite PPAs excluded. APAC volume is an estimate. Pre-reform PPAs in Mexico and sleeved PPAs in Australia are excluded. Data is through July.



Working with corporations & industry / Cost-competitive, clean electricity with no upfront capital investment

As the expectations around corporate responsibility increase, and as transparency becomes more prevalent, companies are recognising the need to act on sustainability. Our approach is to create long-term value through Corporate Power Purchase Agreements (PPAs). Procuring renewable generation provides a cost effective and more sustainable option to our customers' procurement strategies.

Our customers

- Airports
- Bio-fuels
- Mining
- Intensive agriculture
- Data centres
- Transport manufacturers
- Plastics & packaging
- Food & beverage
- Heavy industry

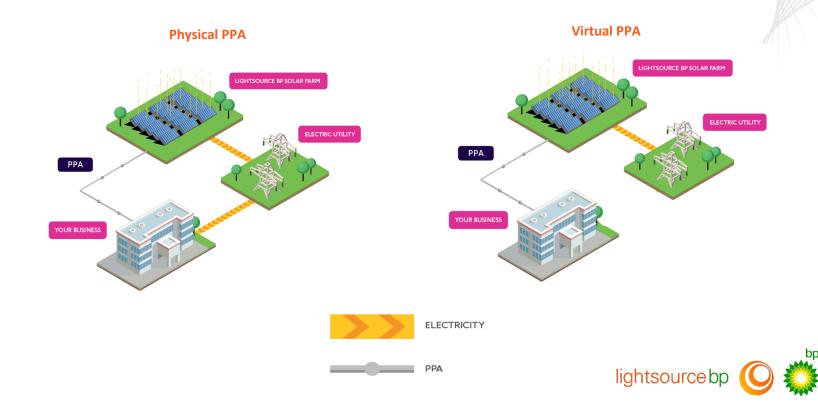






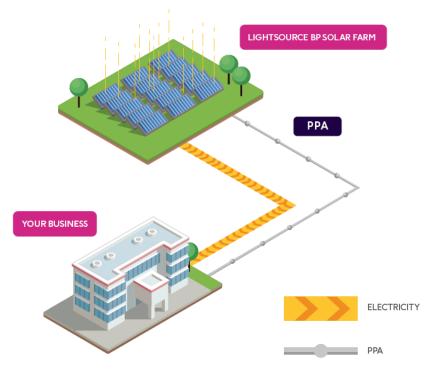
Corporate PPA models

There are two main models for CPPAs, with a Physical PPA power is sleeved via a licensed supplier, whereas with a Virtual PPA there is no physical deliver of power, only REGOs, and typically a contract for difference payment is made.



Private wire PPA model

Local (on site or near site) solar generation delivering renewable energy direct to site behind the meter.





Renewable energy procurement options

Renewable electricity can be secured through a number of routes from the traditional green supply through to private wire PPA.





Benefits of a Power Purchase Agreement

Buyer's perspective



Manage price risk

- Secure a long-term, reliable source of renewable energy supported by Guarantees of Origin (GOs)
- \oslash
- Underpin the development of additional carbon generation

Seller's perspective



Corporates can offer a long term bankable offtake, widening route to market beyond utilities



Long term revenue certainty enables financing of project



Demand for renewable power from corporates is driving development activity in absence of subsidies

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What has happened this year?

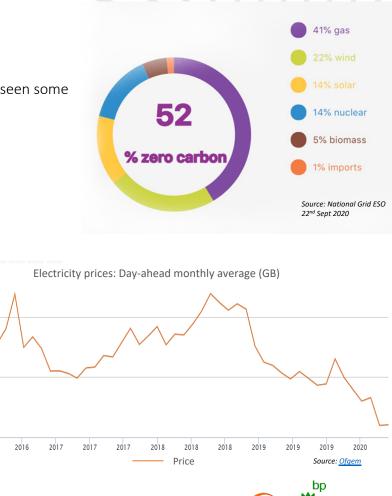
2020 has been an extraordinary year in the energy markets. Although we have seen some challenges, the growth in CPPA activity continues.

Challenges

- Power prices tumbled as we went into lockdown
- Covid-19 pandemic changes power demand
- Landscape of PPA buyers has changed

Opportunities

- Record levels of renewables contributing to the generation mix
- Green recovery
- Acceleration in commitments to net zero carbon



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(MWh)

60

40

20

2016

2016

Outlook for UK CPPA Market

What trends do we expect to see in the UK CPPA market in the future?

What can we learn from other markets?

- Standardisation and "democratisation" of CPPAs
- PPA structures and innovation
 - Firmed volume / base load PPAs
 - Alternative pricing structures
 - Virtual PPAs more accepted in Europe
 - Further afield Cross boarder PPAs
- Development pipelines for renewables projects is growing
- Inclusion of onshore wind and solar in Auction Round 4 of the Contract for Difference in 2021

