



CORPORATE RENEWABLE OFFSITE  
POWER PURCHASE AGREEMENTS:

# THE BENEFITS EXPLAINED

*A Guide for Corporate Energy Buyers*

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As three organisations that are dedicated to growing renewable energy capacity, Scottish Renewables, Schneider Electric, and Brookfield Renewable partnered to develop a set of guides, intended to help facilitate the uptake of offsite corporate renewable power purchase agreements (PPAs) by energy buyers of all sizes. Corporate sourcing of renewables is already taking place in over 75 countries and, as of 2017, corporates have actively sourced 465 terawatt-hours (TWh) of renewable electricity globally.

Companies from diverse geographies and industries are entering this market at a rapid pace, meaning the need for education and awareness of opportunities and recommended strategies has never been greater. To accelerate the deployment of renewable energy capacity, corporate energy buyers and renewable energy suppliers alike must understand the benefits and risks associated with entering the PPA market.

This guide provides definitions, considerations, recommendations and examples tailored specifically to support corporate energy buyers along their clean power journey, in assessing whether a PPA is an appropriate procurement strategy, and how to begin.

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# Executive Summary

Businesses are operating in a time of unprecedented economic and political uncertainty. Creating stability and certainty where possible will be key for business success.

At the same time, organisations are seeking to reduce their environmental impact, show sustainable leadership to their customers and reduce their operational costs.

Securing energy supply through a corporate renewable offsite Power Purchase Agreement (PPA) can help tackle these challenges.

Through signing an offsite PPA with a renewable generator, businesses will purchase electricity at a pre-agreed price structure for the duration of the contract – locking in stable energy supplies.

Renewable energy is reliable and cost-competitive with other generation sources. Governments around the globe back renewable energy and are working to accelerate its deployment.

By supporting renewable energy projects in this way, organisations can boost their green credentials. Along with reducing the environmental impact of business operations, this can be leveraged to support a Corporate Social Responsibility agenda.

This short paper is designed to help corporate energy buyers understand the role and benefits of a corporate renewable offsite PPA.

## The Business Case

When considering entering a corporate renewable offsite PPA it is important to understand the motivations of both parties.

### THE BUSINESS CASE FOR CORPORATE ENERGY BUYERS

- **Potential to reduce costs** – using offsite PPAs, which have now reached price parity in many markets, to achieve cost reduction over traditional supply.
- **Locking in secure energy prices** – providing long-term business certainty and ensuring affordability. Businesses can hedge against price volatility and potential price increases helping with business planning.
- **Reducing environmental impact** – reducing carbon emissions and progressing towards corporate energy and sustainability targets.
- **Green leadership** – supporting sustainable business credentials and Corporate Social Responsibility agendas. Corporate renewable PPAs can give businesses a leadership advantage.

## THE BUSINESS CASE FOR RENEWABLE ENERGY GENERATORS

Renewable energy generators also see benefits from entering into an offsite PPA arrangement with a corporate buyer.

- **Secure buyer** – the corporate buyer provides a secure energy offtaker for the duration of the contract, which helps manage project risk.
- **Bankability** – long-term, secure and creditworthy corporates provide predictable revenue streams help to ease bankability with financial institutions. This is essential for the viability of subsidy-free new build renewables.
- **Market development** – as the corporate renewable PPA market matures, and processes become standardised, a new market for selling power will develop.

# Corporate Renewable Energy PPA Arrangements Explained

A PPA is a contract between a power generator and a buyer (also known as an offtaker). Energy is purchased by the buyer at a pre-agreed price structure per unit for a set period.

A corporate offsite PPA is where the electricity buyer is a business or company, rather than a utility or the public sector.

This paper focuses on corporate renewable offsite PPAs, where the energy is purchased from either existing or new-build renewable energy sources.

Offsite PPAs can be structured in several different ways. Some of these are outlined below. The most appropriate PPA structure will depend on various factors, such as local regulation and the corporate buyer's strategy.

## SLEEVED/PHYSICAL STRUCTURES

In many cases it is impossible to create a physical connection to the source of the renewable energy a business seeks to purchase from. In these circumstances the generator can appoint a third party (a licensed utility or market participant) to deliver the power from the source. This is known as sleeving.

## SYNTHETIC/VIRTUAL/FINANCIAL STRUCTURES

Some offsite PPA models go one step further and use financial structures to replicate the economic effect that a sleeved PPA would have. This can be effective in reducing costs, as sleeving fees are cut. These structures are known as synthetic, virtual, or financial PPAs.



## PRICING STRUCTURES

There are several different pricing structures available across distinct types of offsite PPAs, and these differ depending on whether energy is being purchased from an existing or new build asset and the corporate buyer's strategy.

The most common structures are Fixed-Price and Discounted to Market PPAs.

For Fixed-Price arrangements, the generator and buyer agree upon a fixed PPA price for the duration of the contract. This PPA price is then net settled against the wholesale market price for power, with any fluctuations created by this difference being issued as credit or an invoice to the buyer.

For Discounted to Market PPAs, the PPA price is linked to the wholesale price or an index price for power with a set percentage or nominal amount below the price. A price floor is created, to guarantee a minimum PPA price for the generator.

## CERTIFYING RENEWABLE GENERATION

A benefit for businesses entering the corporate renewable offsite PPA market is the environmental value placed on renewable generation. It is therefore important to clarify how renewable generation will be certified.

The most common instrument in the UK market is Renewable Energy Guarantees of Origin (REGOs). These instruments underpin all environmental claims for renewable generation and must be held by the corporate buyer in order to make these claims for reporting, disclosure, or marketing purposes.

## THE UK PPA MARKET

The UK market for corporate renewable offsite PPAs remains young, but this market is expected to grow. Sleeved PPAs have been most prominent to date.

Following several changes to government support mechanisms for renewable energy, many developers are seeking routes to market on a merchant basis (or 'subsidy free'). This has made fixed price corporate PPAs more attractive as they offer stable revenue for renewable energy generators.

# Common Considerations

## LONG-TERM CONTRACTS & POWER PRICE FORECASTS

The majority of offsite PPAs are long-term arrangements, offering price security for at least a ten-year period. For some businesses, renewable PPAs are the longest contracts entered into.

We recommend that any business carefully considers its estimated future electricity demand and all potential economic and execution risks ahead of entering into a corporate renewable PPA contract. Changes to business models and operational methods can result in a change of energy demand.

To mitigate the risk of a change in circumstances, some companies secure a PPA for only a portion of their energy needs (lower than their lowest demand forecast). Short duration contracts with existing renewable generators may also help overcome any risks or uncertainty.

Ahead of entering a PPA, companies must also consider their view on the long-term price of power to understand the economic impacts of a corporate renewable offsite PPA. Wholesale and market electricity prices can fluctuate substantially over time. Businesses typically procure expert power price forecasts to help inform their decision making, often find greater success when working with a third-party advisor to ensure that the selected generator is offering the most favourable terms.

## FINDING SUITABLE PROJECTS

If a business decides that a corporate renewable PPA could be beneficial, it then faces the challenge of finding a renewable energy project that matches the needs of the business.

Businesses must consider what kind of renewable technologies they seek to procure from, the price of electricity, and other factors, such as the location of the project and how it fits with the business's wider energy purchasing strategy and corporate and social responsibility agenda.

There are an increasing number of tools and third parties seeking to help link corporate buyers to renewable energy projects.

As a first step, Scottish Renewables, Schneider Electric's Energy & Sustainability Services and Brookfield Renewable can all help point your business in the right direction.

## Smaller Businesses: PPAs with multiple buyers

Smaller businesses that use less energy, or are new to the PPA market, may consider collaborating with other buyers to create a multiple buyer PPA. This structure is often known as 'clubbing' or 'aggregation' and is becoming more widely recognised.

Clubbing is useful in sharing the risk among businesses, particularly in situations where it is possible for some smaller businesses to join up with a larger corporate or even a public-sector body.

Multiple buyer arrangements can often offer increased flexibility, as it is possible to structure contracts so that individual members of a consortium can enter in or out at different times. This is helpful if forecasting is difficult for a small business.

Multiple buyer arrangements can also be effective in lowering costs, as a group with significant electricity demand can often do well in negotiations. However, this is a new model, which has not been proven at scale.

Smaller buyers for whom club-type purchasing will not work have other options. Advisors such as Schneider Electric and Brookfield Renewable can help to educate buyers on the variety of project and contracting structures available.

CASE STUDIES:  
**Royal Philips**  
Corporate PPA  
Pioneer

Royal Philips was one of the first non-data centre companies to utilise PPAs. The company announced a major step to meeting its 2020 carbon neutrality goal in 2015 when Philips North America signed a 65 MW offsite power purchase agreement for electricity from a wind farm in Texas, used to power its North American operations with 100% renewable energy while positively impacting the bottom line. Philips' decision to use a PPA to advance this goal was simple: it's a solution that reduces the environmental impact of its operations and improves human well-being in a way that drives business value.

Philips has further advanced its renewable energy goals in Europe by joining with three other companies to form the Dutch Wind Consortium. In 2016 and 2017, the Consortium executed two Dutch PPAs for a total of 140 MW. Power from those projects began to be delivered to Dutch operations in early 2018.

Today, the company is exploring additional PPA opportunities in the hopes of replicating this success and advancing its green energy agenda.

**Kennoxhead**  
Subsidy Free  
Wind Development

The trend towards declining or zero subsidy availability for new renewable energy operations has dramatically changed the way renewable power developers approach routes to market for new build onshore wind. A viable commercial route to market is an increasingly important factor in ensuring that new developments have the bankability required to build out.

Coinciding with the decline of government supported subsidies, however, is a dynamic and accelerating trend of corporates contracting renewable power directly with generators. As such, renewable power is on the cusp of breaking through into a new subsidy-free world. Corporate offsite PPAs allow corporate offtakers to stabilise their energy costs at a value below current electricity market prices as well as potentially supporting the corporate's own sustainability goals.

Brookfield's 112 MW Kennoxhead wind development project in Scotland is an example of what this new renewable power partnership between power generators and corporates will look like. The project is planning consented and has contracted grid connection in place. Kennoxhead also benefits from valuable local support from neighbouring community groups. Following the closure of the community's Glentaggart coal mine in 2011, they have embraced the move away from fossil fuels and are actively working with Kennoxhead to help secure a more sustainable future.

Brookfield Renewable is currently engaging with interested corporates on securing a route to market for Kennoxhead. Upon completion, the wind farm will revolutionise the sector and provide 330 GWh of 100% truly additional green energy to the UK market.



## About Scottish Renewables

**Scottish Renewables** is the representative body for the renewable energy sector in Scotland, working to grow a sustainable industry which delivers secure supplies of low-carbon, clean energy for heat, power and transport at the lowest possible cost. We represent around 280 organizations ranging from large suppliers, operators and manufacturers to small developers, installers and community groups, and companies right across the supply chain.

[www.scottishrenewables.com](http://www.scottishrenewables.com)

## About Brookfield Renewable

**Brookfield Renewable** is one of the world's largest renewable platforms, with an installed capacity of more than 17,000 MW across five complementary renewable technologies (hydro, wind, solar, distributed generation and storage). Brookfield Renewable is the flagship listed renewable power company of Brookfield Asset Management and is on the New York and Toronto stock exchanges. Operating across 25 power markets in North America, Latin America, Europe and Asia, our 2000+ employees combine a global presence with unique local expertise and partnerships in the communities where we live and work.

Our UK and Ireland wind portfolio has an operational capacity of approximately 400 MW with a development pipeline more than 1 GW. Our in-house development and operations teams are experienced in managing renewable power projects at every stage of the development life cycle, while our trading and power marketing teams work with corporates to develop flexible, customer focused, renewable power solutions with the ability to provide various terms, shapes, and volumes; competitively priced, without exposure to fossil fuels.

Contact us for more information about how Brookfield Renewable can help you achieve your sustainability vision. [www.brookfieldrenewable.com](http://www.brookfieldrenewable.com) Email: [uk@brookfieldrenewable.com](mailto:uk@brookfieldrenewable.com)

## About Schneider Electric Energy & Sustainability Services

**Schneider Electric's Energy & Sustainability Services** helps thousands of companies in more than 100 countries buy energy smarter, use energy more efficiently, and drive sustainable growth.

ESS' Renewables & Cleantech team is a pioneering global supplier of renewable energy and clean technology products and services—including the New Energy Opportunities (NEO) Network™—for the C&I sector. For more than 15 years, the team has been providing unparalleled experience and expertise on strategic renewable energy procurement. The ESS team has advised on more than 4 GW of new wind and solar capacity and is the recognised global leader in cleantech consulting, serving more clients than any other procurement advisor, worldwide.

[Contact us](#) to learn more about how strategic renewable PPAs can accelerate your energy goals.

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