EM Magazine

ENERGY GUIDE

ALL YOU NEED TO KNOW ABOUT

CORPORATE POWER PURCHASE AGREEMENTS

IN 2021; A CHECKLIST

ALL YOU NEED TO KNOW ABOUT CORPORATE POWER PURCHASE AGREEMENTS (CPPAS) IN 2021; A CHECKLIST

Author: Chris Bowden, Managing Director, Squeaky

It is over 13 years since we closed our first Corporate Power Purchase Agreement (CPPA) in Europe, and whilst the demand for CPPAs has increased globally, the contracting frameworks and risks allocation hasn't changed all that much.

If you are a business that is looking to reduce its impact on the plant, now could be the time for you to consider a CPPA.

With this in mind, I have drawn together a CPPA checklist to help you: understand how a CPPA can help you reach net zero, learn how to negotiate a CPPA, protect yourself against the risk factors of a CPPA.

What is a Corporate Power Purchase Agreement (CPPA)?

A CPPA is a long-term contract between an energy buyer and an energy generator. The two parties agree to buy and sell an amount of energy which is, or will be, generated by a renewable asset. A CPPA is usually agreed over a period of 10-15 years, although we are starting to see shorter terms.

The True Benefits of a CPPA.

A significant proportion of renewable energy supply has historically involved purchasing renewable energy certificates or procuring green tariffs from utilities. However, this is increasingly seen as greenwashing because quite often the underlying energy supply is wholly, or partly fossil fuel based.

The fact is, responsible companies are looking for more tangible ways to demonstrate their environmental commitment by procuring energy directly from existing or 'new to earth' renewable energy generators by using a CPPA. And the business benefits are plentiful.

A CPPA allows a corporate business or public sector buyer to:

1. Diversify its energy supply sources across multiple technologies.
2. Protect against energy price volatility.
3. Lock in long term supply of renewable energy.
4. Be certain about the source of its power.

But the benefits don't stop there. From the generators point-of-view, a corporate buyer represents an attractive opportunity to diversify income streams away from traditional utility offtakers that very rarely offer long term fixed price arrangements. In fact, the cash injection from a corporate buyer could be a generator's key to unlock finance for a renewable energy project, which would have been inaccessible if the project was reliant on a single utility (or risky merchant wholesale markets) for its long-term revenue stream. This is a huge bonus in volatile energy markets where subsidy support for renewable energy is slowly being removed.

Using a CPPA to Power Your Net Zero Strategy in 2021.

A recent study by Climate Group and CDP has revealed that the current membership of the RE100 (a global corporate renewable energy initiative which brings together businesses committed to 100% renewable electricity) now has a bigger electricity demand than either the UK or Italy. Most importantly, RE100 members in the UK have made the fastest energy transition progress with over 90% of their electricity coming from renewable sources.

Certainly, these statistics are impressive, but how does this impact CPPAs? Well, most of this 90% is underpinned by purchasing renewable energy certificates or procuring green tariffs from utilities, not from CPPAs. In April 2021 the UK government announced it will be setting the world's most ambitious climate change target in law. And meeting this new target will require a huge shift in the way we power our businesses. The truth is, if the RE100 members and you are serious about reaching net zero, then you must power your business with energy that has no adverse impact on the environment, i.e. clean energy that you know comes from non-polluting, sustainable or carbon neutral sources.

The UK has the third largest number of RE100 members after the USA and Japan. And soon clean energy will become the must have product not just for RE100 members, but for all businesses. And every single one of those businesses needs to figure out how they will integrate clean energy in a quick, cost effective and sustainable way.

The Three Main Considerations for Sourcing Clean Energy Through a CPPA.

A CPPA will not only help you increase the visibility of your future electricity costs, but it will also help you on your journey towards net zero. If you are a corporate business or public sector body, there are several factors to consider.

1. What volume of power do you want to procure under a CPPA?

Volume will typically be the percentage of the forecast power demand that you are willing to procure via a CPPA. A quick, but important point to note is that this amount may differ under different market environments, pricing structures or contract lengths.

To work out how much you should buy using a CPPA, you may wish to start by building a matrix under the following scenarios:

- Volume
- Term
- Price

And then consider the differentials that may exist within these. For example, if the price is lower will you be inclined to buy more? Or, is there are premium you would be willing to pay for 'new to earth' generation?

2. Get stakeholder approval of your matrix.

The reality is that you need to know your business is serious about transacting at the prices you've set. If they are not, you are wasting both your time and the generators time, and this can cause real reputational issues in the market for your business. Not to mention your time and money.

3. Decide which renewable energy technologies you are willing to buy from.

You need to be certain about which renewable technologies you and the key stakeholders in your business are happy to purchase. For example, are you only willing to buy from wind and solar (both clean energy sources)? Would you buy from existing generation, 'new to earth' or both?

You may want to transact with existing generation at a lower price or because you are looking to hit targets sooner. And it is not uncommon to start with existing generation and shift to 'new to earth'.

All CPPAs Come with Risks.

A CPPA procurement strategy doesn't come without its challenges. And it's important you have a view of some of the more complex contracting and risk issues that can make it tricky to value a CPPA from any given project or portfolio.

Whilst there are various ways you can approach a contract, the main thing to consider is the transfer of risk between the parties. There are two main 'risk buckets' you need to consider; market risk and credit and contractual risk.

The market risks of a CPPA.

There are three primary market risks of intermittent energy generation like wind and solar.

1. The first is Wholesale Price Risk. Wholesale Price Risk is the underlying wholesale price risk typically referenced against the traded baseload prices, which are visible to both buyer and seller up to three years ahead. They are also open to negotiation beyond this period. In fact, short-dated wholesale prices can, and have, moved by over 100% in the last year.

2. The second market risk of a CPPA is Capture Risk. The term 'capture price' is related to the actual electricity price achieved by a generator in the market, and it is compared against the wholesale price measured as a baseload. The inherent intermittency of power generated from renewables can create pressures on revenue as periods of highest output don't necessarily correspond to periods of highest demand. It's worth noting that this may be even more problematic if wind and solar conditions are favourable

because this depresses prices. This is also referred to as 'price cannibalisation'. Unfortunately, the depressive effect of 'price cannibalisation' is expected to grow over the coming years and this has a direct impact on the cost of a CPPA.

3. Finally, when considering a CPPA, you must consider the Imbalance Risk. The imbalance price is the price of electricity that generators or supplier pay of an imbalance in the UK electricity grid. When an asset's imbalance correlates to the power system imbalance (as intermittent generation does) the cost will be higher. Whilst it is not as significant a risk as Capture Risk, Imbalance Risk can add a few more per cent to the cost of a PPA over its life. Whilst the wholesale price risk is typically fixed for the term of the CPPA, the price capture and imbalance risks are typically fixed for a shorter term via a utility and are typically taken by the buyer on a short-term basis. As more buyers enter the market this cost is likely to go up. That said, these risks can be allocated differently and to different parties within each deal. This is why it is important to have a clear definition and understanding of the market risks emerging from a CPPA.

Credit and contractual risks of a CPPA.

Credit constantly comes up as one of the key risks of a CPPA. Poor credit can sink a deal, so it's important to consider this risk upfront. The first thing to be aware of is that both parties have very different exposures. For example, if the corporate defaults it could wipe out the entire equity of the generator and some of the project debt if it is financed this way. On the other hand, if the generator defaults, the corporate is only exposed to the replacement cost of the CPPA. This could actually be a profit if the CPPA is priced higher than the market when the energy generator goes bust.

In addition, under a CPPA, power is constantly delivered. But payments for that power are typically monthly and in arrears. In a nutshell, this means that the generator is effectively lending power to the corporate. On top of this, once a wind farm or solar park is built, its feedstock costs, wind and sun are all free. And its fixed opex is very low. As a result, solar parks and wind farms generate huge amounts of cash.

Combine this with the minimal mechanical risks and it is clear to see that renewable generation projects are very low risk (hence why pension companies like to own them). As such generators will typically be more concerned about the buyers credit risk than the buyer should be about the generator.

On the other hand, there are ways you can address some of the payment risks, such as: advance payments, material adverse clauses (MACs), increased payment frequency, and ensuring you are covered by payment insurance.

It is worth noting that generators may also seek parent company guarantees (PCGs) if the buyer is part of a larger group or they may look for a Letter of Credit or another form of collateral (cash, or liquid securities for example) on an escrow account. Generators will also typically ask for increased credit support if the buyer's credit or tangible net worth falls below a certain rating or value. It is important for a buyer to be flexible and not think they are entering a typical bilateral arrangement where both parties have similar exposures.

A final note on the risks of CPPAs.

If you are a buyer, you should also consider force majeure risk, which allows parties to cease meeting contractual obligations during unforeseen events outside of reasonable control.

And operation risk which includes the performance of the project, including curtailment, equipment malfunctions, and unplanned system outage.

What Is the Future for CPPAs?

It's likely we will see more innovation in aggregation. Corporate or public sector buyers with low energy demands, little experience, or poor credit profiles, will club together to procure a CPPA. For instance, in 2019, twenty of the country's leading universities joined forces to strike a renewable energy deal to reduce both their bills and carbon footprints. The universities bought £50 million of clean energy from a portfolio of wind farms. The deal fixed power prices at a competitive rate for the next ten years, and in turn, minimised their exposure to market volatility. It was the first CPPA of its kind in the UK.

Aside from this, we expect that there will be an expansion of CPPAs to mid-sized corporates as contracting frameworks become more standardised. In addition, we may also see more third-party traders and insurers coming into the market to provide services.

To Conclude.

One thing is for sure, and that is that the demand for CPPAs has never been bigger. Renewable energy is finally shifting to a sellers' market. So much so that if the RE100 companies in the UK decided to procure all their energy from CPPAs, there wouldn't be enough available supply. And that's before mid-market corporates and public sector bodies enter the market in a meaningful way. In short, the future looks bright for generators and the transition to green energy.