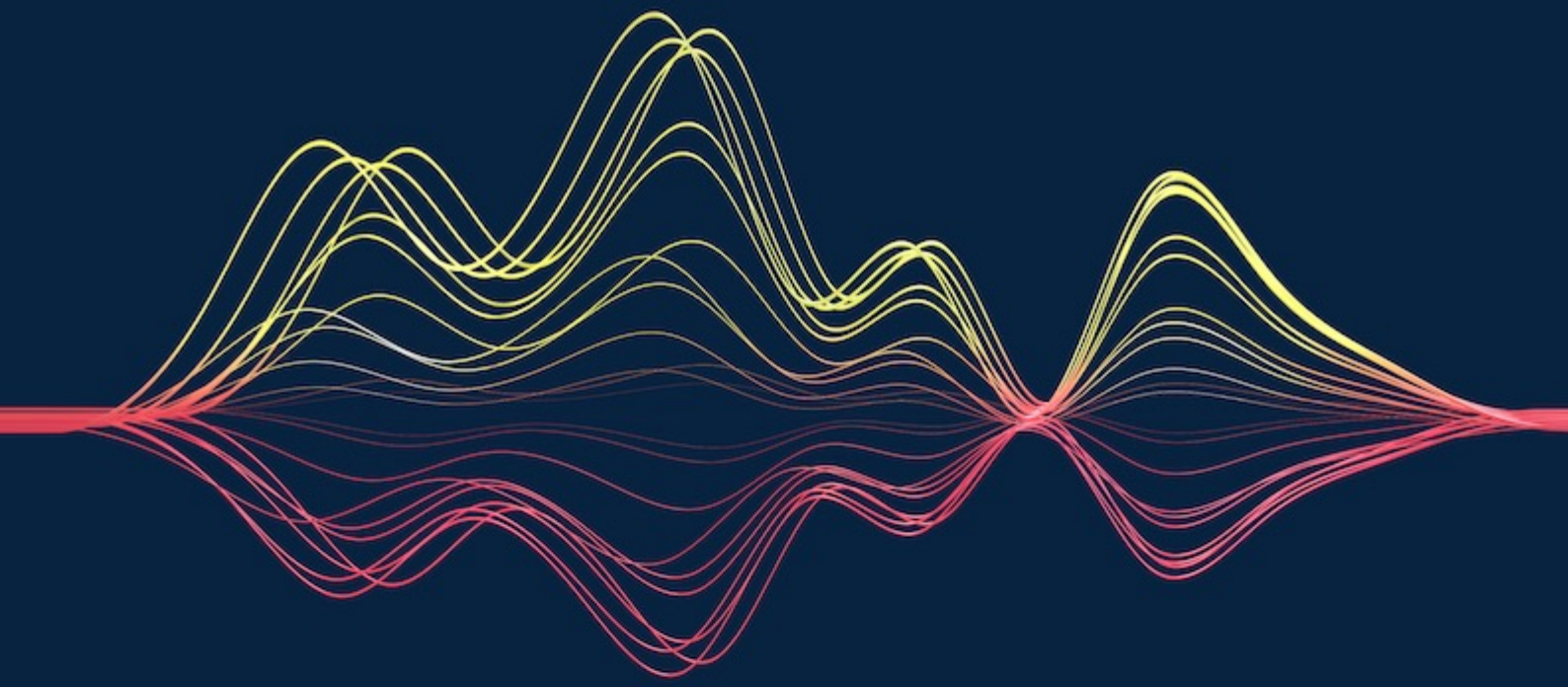
SOUTH AFRICA

Corporate Power Purchase Agreements



DLA PIPER

South Africa

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PPA structures and parties involved

To what extent are corporate PPAs presently deployed and what sort of structure do they take?

The use of corporate power purchase agreements **("CPPAs")** has increased in recent years, partially due to renewable energy generation and storage technology becoming more affordable. It has also been driven by increased appetite from corporates to act in a more sustainable and socially and environmentally responsible manner. Due to certain intermittent electricity supply issues faced in the country, corporates have also sought to diversify their energy supply arrangements so as to place less reliance on utility generated power.

The most common forms of CPPAs in South Africa, in our experience, tend to be those concluded on a direct or private wire basis or a wheeled basis.

Direct or private wire CPPAs typically involve a generation facility being built or installed on, or adjacent to, the property of the corporate. The facility is developed, owned and operated by an independent power producer **("IPP")** and the corporate buys all or a portion of the power from the IPP. Any required power in excess of that generated by the IPP is provided by the utility (national utility or municipality).

Generally speaking, for a wheeled CPPA, the corporate concludes a CPPA with an IPP and electricity is 'wheeled' by the utility from the IPP to the corporate via the grid. The CPPA itself will be a bilateral arrangement concluded between the corporate and the IPP, and will regulate the purchase by the corporate of renewable energy from the IPP. In addition to this, a series of further agreements is required to cater for the 'wheeling' of energy. More often than not, wheeling is achieved through a series of amendments or contractual modifications to (i) the standard form power supply agreements between the utility and its customers (i.e. the corporate) and (ii) the distribution, connection and use of system arrangements between the grid operator (Eskom) and generator (the IPP).

Do the country's regulators allow corporate owners to purchase (1) directly from a facility, or (2) from a choice of suppliers?

Yes, corporate owners can purchase directly from a facility. While regulators notionally allow corporates to purchase power from a choice of suppliers, in reality the choice of suppliers is often limited (largely, in many instances, to local municipalities and/or Eskom, for example).

Other than the generator and the off-taker, are any third parties commonly party to the PPA structure (e.g. a utility or other market agent)?

As outlined in Structures, the parties to a CPPA commonly tend to be the IPP and the corporate. Third party involvement is perhaps less common in this market other than in cases of wheeling which, as above, often requires the involvement of the grid operator.

Is a generator permitted to sell electricity directly to an end user? If so, do they require a licence or other form of authorization?

Yes.

In terms of the Electricity Regulation Act No. 4 of 2006 **("ER Act")**, subject to certain exceptions (see below), a licence issued by the National Energy Regulator of South Africa **("NERSA")** is required to operate any generation, transmission or distribution facility, import or export any electricity, or be involved in trading electricity.

There are exemptions to the requirement for obtaining a license, and we have set out some of the more notable examples of the exemptions below.

If a generation facility (i) does not have a point of connection to the national grid (e.g. a captive own use facility), (ii) is for the sole purpose of providing standby or back-up electricity (for a duration not longer than a supply interruption), or (iii) is connected to the grid and does not have a generating capacity of greater than 100KW (subject to certain additional administrative requirements), it does not require registration with, or licence from, NERSA.

While a licence is not required, a generator must, in certain circumstances, nonetheless register with NERSA, including:

- Generation facilities with an installed capacity of no more than 1 MW which are connected to the national grid and (i) supply to a customer or related customers with or without wheeling of that electricity through the national grid, and (ii) the generator complies with the grid code and has entered into a connection agreement with the holder of the relevant distribution licence.
- Generation facilities that produce electricity from waste or the residual product of an underlying industrial process where (i) the generation facility is operated solely to supply electricity for consumption by a customer who is related to (or an affiliate of) the generator or owner of the generation facility, and (ii) the generator complies with the grid code.

Challenges

What are some of the technical, political, financial or regulatory challenges to corporations adopting green energy in the short/medium term in your country and how have these challenges been overcome (or how can they be overcome)?

In recent years, there has been uncertainty and debate regarding the licensing and registration requirements for generators (particularly regarding whether certain own use, embedded generation and *de minimis* exemptions were applicable or not). However, recent regulatory updates (as recent as April this year), have introduced a series of exemptions for generators from licensing (as above) which has clarified the position substantially.

In addition, the Minister of Mineral Resources and Energy has approved that NERSA may process licence applications for the following self-generation facilities of above 1MW even if they are not in compliance with the Integrated Resource Plan, 2019 **("IRP 2019"):**

- a generation facility that is connected to the national grid, in circumstances in which the generation facility supplies electricity to a single customer and there is no wheeling of that electricity through the national grid; and/or
- a generation facility that is connected to the national grid, in circumstances in which the generation facility is operated solely to supply a single customer or related customers by transporting electricity through the national grid where wheeling arrangements are in place between all affected parties.

Previously, if not in compliance with the IRP 2019, prospective applicants were required to obtain Ministerial approval for deviation from the IRP 2019 before applying to NERSA for a licence. This has, to some degree, simplified the process for applicants regarding the above facilities.

In addition to this, there was a fair amount of uncertainty around the role that energy or battery storage could play in the energy matrix in South Africa. Thankfully, the regulations on New Generation Capacity have further been amended, *inter alia,* to allow for the procurement of new generation capacity by other organs of state, active in the energy sector which specifically includes generation capacity derived from energy storage.

Regulatory changes

Are there any anticipated regulatory changes which will alter the regulatory landscape for corporate green energy and corporate PPAs?

In February 2019, the President of South Africa announced a proposal to unbundle Eskom into three separate businesses, namely generation, transmission and distribution – each of which will be housed in separate legal entities under Eskom Holdings SOC Limited. Since then, the process of unbundling has begun and, at the date of this report, we believe that divisional boards have been established and managing directors appointed for each of the business units. The unbundling is expected to be complete by the end of 2022 and will have a considerable impact on the structure of the energy market. It is likely this will necessitate regulatory changes to cater for, and differentiate between, the roles of each of the separate unbundled Eskom entities in the wider energy market.

Interesting to note is that circa 10,000MW of generation capacity in South Africa is scheduled to be retired in the next 10 years, which creates the need for new generation capacity, much of which we believe (at this stage) will be procured from the private sector and, more specifically, clean or renewable energy sources. Regulatory reform and policy alignment (particularly in policy planning documents such as the integrated resource plan, as above) will be crucial to ensuring that sufficient generation capacity is procured from the private sector.

Incentives and benefits

What is the corporate appetite for green energy, including any political or financial incentives available to corporates to adopt green energy?

The appetite for clean and sustainable energy amongst corporates in South Africa is growing rapidly, particularly given the recent increased focus on sustainability and environmental, social and governance (SESG) considerations globally and in South Africa. Notable cost reductions due to improvements and efficiencies in renewable energy technologies have also made it less expensive to generate electricity from these sources. We expect this trend to continue.

The Income Tax Act No. 58 of 1962 permits a taxpayer to claim a deduction on the costs incurred in respect of plant, machinery and articles owned by it, that are first brought into use by that taxpayer in the course of its trade in the generation of electricity from various renewable energy resources. For example, in respect of photovoltaic solar energy of more than 1MW, a taxpayer is allowed a deduction of the costs to the taxpayer of the asset producing the electricity on a 50/30/20 basis, being that a taxpayer is allowed a 50% deduction of costs in the first year of use, 30% in the second year and the balance in the third year of use. Where a photovoltaic solar energy system produces less than 1 MW of power, then the taxpayer is allowed a 100% deduction in the first year of use.

South Africa also introduced a carbon emissions tax under the Carbon Tax Act No. 15 of 2019 on 1 June 2019, which is to be implemented in three phases. The first phase is currently in implementation (the South African government has indicated that the impact of the carbon tax will be reviewed before the next phase is implemented in 2023). The carbon tax is levied on entities that operate emissions generation facilities at a combined installed capacity equal to or above certain carbon tax thresholds (which apply in respect of various activities). Certain allowances or offsets are available linked to (for example), emissions levels, trade exposure, participation in carbon budgets and investments in emission reducing projects.

What are the key local advantages of the corporate PPA model which can benefit our clients?

1. Potential increased reliability of supply by diversifying suppliers to avoid possible supply constraints.
2. Price certainty given the uncertainty of utility price increases.
3. Reduce carbon footprint and potentially benefit from offsets or incentives in terms of the Carbon Tax Act No. 15 of 2019.
4. Support local economic development (including skills development and job creation) through a more established local renewable energy industry.

What subsidies are applicable to the generation and sale of renewable energy?

The Department of Minerals and Energy **("DoME")** established the Renewable Energy Finance and Subsidy Office, whose mandate includes:

- the management of renewable energy subsidies; and
- offering advice to developers and other stakeholders on renewable energy finance and subsidies. This includes information on the size of awards, eligibility, procedural requirements, and opportunities for accessing finance from other sources.

The subsidy is milestone driven, and the milestones are set out in a subsidy agreement to be entered into been the DoME and the recipient of the subsidy (the key milestones being financial close, construction and commissioning etc). The subsidy takes the form of a grant and is "once-off" in that it is a single disbursement linked to a construction milestone, and is provided on the basis that if any subsequent milestones are not met, the DoME may request that the grant be paid back.

We have not been involved in any projects which, to our knowledge, have benefited from the subsidy.

Does your country implement a national support scheme with tradable green certificates (such as guarantees of origins)?

Not at present. While the trading of renewable energy certificates **("RECs")** is recognised in South Africa, the South African government does not participate in or regulate RECs (a REC initiative on regulation and certification was suspended by the government in 2010/11 and has not, to our knowledge, been formally recommenced). The South African government does, however, permit RECs to be traded voluntarily. There is therefore no central registry in South Africa and the market in South Africa currently operates on a voluntary basis (in terms of certification, trading and registration).

Typical PPA terms and risk allocation

To the extent corporate PPAs are deployed, how are prices, terms and risks affected?

Topic	Details
Do prices tend to be floating or fixed?	Given the private nature of contracts, it is difficult to generalise on commonly used pricing arrangements across the South African market. However, in our experience prices tend to be fixed (often indexed to inflation).
What term is typically agreed for the PPAs?	In our experience, generally between 10 to 20 years.
Are the PPAs take-or-pay or limited volume?	Generally, take-or-pay.
Are there any other typical risks?	Foreign denominated input costs as many components of the facility are still imported. Recently, pandemic related risks have been prevalent (particularly whether the impacts of the pandemic constitute force majeure events etc). Wheeled CPPAs may offer no guarantee of system availability due to the fact that, in certain circumstances, electricity is wheeled through the national grid. Changes in law, particularly regarding recently promulgated pandemic related legislation (disaster management regulations etc).

To the extent corporate PPAs are deployed, in whose favour will the risks typically be balanced?

Type of risk	Details
Volume risk	Where a CPPA is based on fixed volume terms, the generator

	generally bears the risk. Conversely, where an offtaker agrees to purchase whatever energy is produced under the CPPA, the offtaker bears the risk.
Change in law	The CPPA will usually include a change in law provision to ensure that the parties are rebalanced to reflect their original economic intentions. In our experience, this risk often sits with the offtaker (particularly where the change in law results in an increased cost etc).
Increase / reduction of benefits	Given the private nature of contracts, it is difficult to generalise on this across the South African market. However, where the reduction of benefits is caused by a change in law, these may be covered by the change in law clause (see above) and borne by the offtaker.
Market liberalisation (if applicable)	Given the private nature of contracts and the subjective nature of the application of this on contracting parties, it is difficult to generalise on this across the South African market. In our experience, this is likely to be dealt with as a change in law event (see above, as the liberalisation is likely to involve regulatory reform) or can specifically be allocated to the offtaker or generator (and may find application as a result of an effect of the market liberalisation).
Credit risk	Given the private nature of contracts and the subjective nature of the credit worthiness of contracting parties, it is difficult to generalise on this across the South African market. The offtaker under the CPPA may be required to provide credit support (a parent company guarantee, letter of credit etc) to mitigate payment risk, which is ultimately dependent on the credit worthiness of the offtaker and/or may be driven by the requirements of the financiers of the project/facility.
Imbalance power risk	This is likely to be a risk for the offtaker in South Africa as the offtaker is often forced (under structures typically in use in South Africa, see above) to procure any required power in excess of that generated by the IPP from the utility (see above) and Eskom manages this risk, as balancing authority (see below).
Production profile risk	In our experience, it is often the buyer who bears this risk, as it may be forced (under structures in use in South Africa, see above) to procure any required power in excess of that generated by the IPP from the utility (see above and below).

Balancing

Does your country operate a balancing responsibility scheme?

In substance, yes.

If your country operates a balancing responsibility scheme, who is the balancing authority and do the generator and offtaker typically undertake balancing themselves?

Under CPPAs in South Africa, our experience is that the generator and offtaker do not typically undertake balancing themselves.

Eskom is the system operator and is the legal entity responsible for short-term reliability of the interconnected power system. As part of its function, it controls and operates the transmission system and dispatches generation (or balances the supply and demand) in real time. As such, this really only applies where there is wheeling of energy.

Significant transactions

What significant transactions/deals have taken place in the last 12-18 months?

AB InBev entered into multi-tiered CPPAs with SOLA Energy Group for the provision of 8.7MW of renewable energy to its breweries. The deal was worth R400m.[1]

[1] AB InBev bolster breweries with 8.7 MW renewable energy from SOLA

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