

## The case for RE projects in Africa

By Theuns Ehlers 20 Sep 2017

Renewable energy has journeyed from the subsidised fringes of electricity supply to become an integral part of the power landscape, particularly across Africa where it has the potential to provide millions of citizens and businesses with access to a cleaner, more affordable, easily deployable and rapidly scalable source of power.



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A key driver of this journey has been a notable reduction in technology costs through increased economies of scale, more competitive supply chains and technology improvements. In no technology are the results more pronounced than in solar PV. In South Africa, the cost of utility scale solar PV projects has plummeted from more than R3.50/ kWh to below R0.60 / kWh in the space of four years. The net result is that renewable energy projects, be they for utility or corporate off-take, no longer require subsidies to compete against traditional base load power.

Realising this, energy developers of utility scale projects have been, and continue to capitalise on these cost reduction benefits with many African solar PV and wind project tariffs bid at significantly better rates than the current new-build base load power tariffs of ca. US10c/kWh.

## Benefits of corporate off-takes

Notwithstanding the significant advances made in the utility sphere, the expectation is that projects with corporate off-takes stand to benefit most from these cost reductions. Whereas before most corporate projects were done at a premium to grid tariffs and linked to broader corporate social investment (CSI) or 'green' initiatives, now these projects are also positively contributing to a company's bottom line.

To this end, these companies are looking to renewable energy solutions to provide; (i) energy savings through a discounted tariff and a reduction in utility maximum demand, (ii) energy price-path certainty, corporate off-take tariffs are typically fixed, or are indexed to inflation, reducing exposure to the higher-than-inflation increases typical of most utilities (iii) improved energy security for businesses in remote / grid-poor areas through on-site access to alternative energy sources, (iv) an enhanced reputation and brand through meeting sustainability expectations of customers, investors and other stakeholders, (v) a reduction in harmful emissions and avoidance of long-term carbon and environmental penalties, and (vi) a quick to deploy solution, corporate projects do not have the same lengthy construction periods associated with larger utility projects. Depending on size, a small corporate PV plant (less than 1MW) can be commissioned in a matter of weeks whilst a medium sized plant (less than 5MW) can be commissioned in under six months.

Consequently, with proven technology, short construction timelines and significant off-taker appetite confirmed, it appears that the largest challenge facing these corporate projects is the availability of appropriate funding structures.

## Lack of financing structures

One might expect that because these projects are smaller that they would be easier to finance. However due to their small size, as well as a lack of specific financial instruments and the high cost of structuring finance within traditional project finance parameters, funding of these corporate projects is potentially more complex than traditional utility projects.

Additionally, corporate projects carry a different risk profile to that of a utility-backed project. With utility-backed projects, the utility's obligations are typically backed by the host government. Corporate projects on the other hand involve corporate credit, which in most cases is weaker than that of the utility or host government. Furthermore, it is easier to take a longer-term view on the government or utility in question, whilst financial institutions generally have limitations in terms of funding tenors for corporates. The net effect of this is that it is difficult to secure long-dated finance for corporate projects, which is generally a prerequisite to realising tariffs that are competitive with that of the utility.

Nevertheless, promising steps have been made by financial institutions to develop structures that mitigate this risk and support the development of the corporate energy projects market including credit enhancements and standard form documentation to support swift implementation and lower transaction costs.

There are already some success stories in markets such as the US, where almost 10GW of renewable energy deals based on corporate off takes have been signed. Africa has not seen deals on this scale yet, but corporates are increasingly recognising the value of these deals and the opportunities therein. This includes a new market for equipment suppliers, engineering procurement and construction (EPC) companies and operations and maintenance (O&M) companies as well as power project developers who can make profitable returns as equity investors in IPP-type structured corporate deals.

As financial services providers and power producers continue to collaborate to unlock effective and efficient funding mechanisms, corporate power generation will further improve, opportunities will become more widespread and solutions will become ever more innovative.

## ABOUT THE AUTHOR

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