

ANALYSIS

Q&A: Gridworks on the African grid conundrum

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inspiratia speaks with Gridworks CEO Simon Hodson and investment manager Shaun Githuku on grid and off-grid developments in Sub-Saharan Africa

Gridworks, established in 2019, is a development and investment platform wholly owned by UK development finance institution (DFI) [CDC Group](#). Gridworks is mandated to target equity investments in Africa's transmission, distribution, and off-grid market, acting as long-term investors as well as partners to government, utilities, and companies in the power sector.

CDC backed Gridworks with an initial commitment of US\$325 million (£256m €287m) in [June 2019](#). The [following December](#), Gridworks made its first investment in commercial and industrial (C&I) focused company Mettle Solar Investments, injecting US\$7.3 million (£5.6m €6.6m) in growth capital to expand the developer's operations beyond South Africa to other Sub-Saharan Africa countries.

How critical is the demand for grid assets in Sub-Saharan Africa?

Simon Hodson:

Over the past 25-years the continent has seen significant private interest in generation. However, this puts African governments in a tight spot with rapid increase of capacity in their networks but poor or no infrastructure to both deliver power to customers and then collect the necessary payments.

In many cases [governments have] committed additional generation capacity that they don't have sufficient offtake for, which places an economic burden on either the government via subsidies or the consumer through higher tariffs.

The reality is that because generation and IPPs are considered the easy part of the jigsaw puzzle and relatively ring-fenced, the market indirectly closed its eyes to the rest of the sector. Creating a massive economic need [circa US\$345 billion (£263bn €291bn) needed by 2040 for transmission and distribution].

If [African] leaders are serious about making a dent in electrification needs of the continent and building sustainable power sectors they have to find a way to augment their state coffers with private capital. Otherwise, there just isn't going to be enough dollars in the pot to support the investments needed to connect customers and provide them with a high-quality service.

What role do you think private equity is going to play in closing the financing gap?

SH:

In principle, there is investor appetite for financing grid infrastructure but transforming interest into transactions has proven incredibly difficult. Gridworks has been specifically formed to help address this gap. Utilities remain under-invested in many countries leading to poor service delivery to consumers and businesses.

A few utilities have been privatised or adopted other contractual structures in order to open up spaces for private sector partners. The delivery method is in the hands of the host government and many different methods can work, whether a concession, privatisation or other form of bespoke PPP.

But the one thing is that it does involve private capital being mobilised in some shape or form.

What factors have led to the growth of the C&I market in the region?

SH:

The C&I market is very small today relative to the traditional grid. Growth of the C&I market is driven mainly by business customers who need higher quality power immediately to allow their businesses to grow and flourish. C&I will form part of a holistic solution for power sectors in our markets over time, much in the same way as is happening in developed markets.

Shaun Githuku:

Simultaneously, what Gridworks is doing is approaching governments to encourage the continued integration of renewables but also emphasising that the benefits will come from having better operating utilities.

We are now working with a couple of governments on how to invest at the utility level, and thereafter plan to take a cohesive approach to electrification. So where does it make sense for them to build a grid out and where does it make sense to consider other solutions.

We have the ability to take a very long-term view to improve those operations and bring investors to the relevant parts of the sector.

What is Gridwork's strategy for off-grid assets?

SG:

It's very interesting because as we've spent a lot of time building the Gridworks strategy and now trying to execute it, it's really coincided with the growth of the mini-grid sector in Africa.

We are long-term investors and we want to support businesses that are going to be around in 10-20 years.

[We look for] pioneering opportunities that show what sustainable mini-grids can do. We look very selectively at one or two opportunities because the next step is being able to show that you can show successful models that can be replicated. Where does it make sense to have that mini-grid? Where does it make sense to put out low voltage lines?

Are companies with battery services considered more attractive?

SG:

Battery storage is, and will become, integral to the integration of renewables on and off the grid. We see more opportunities to invest in companies that are more regularly using storage to improve the case for renewables and are excited to do more of the same in the future. In fact, we are already [invested in Mettle Solar](#), a market leading C&I solar company that uses batteries for their off-grid systems in Kenya and other African countries.

What challenges are off-grid assets facing in accessing debt to scale operations and reach?

SG:

I can imagine that for lenders it's quite difficult to take the same comfort in mini-grid cash flows that are not contracted [like IPPs] and where demand must be actively increased through productive use initiatives. This can take time and likely makes it difficult for lenders to take comfort at the onset.

The sector is still relatively young, but I'd imagine as you get greater track record you have more information that a lender can look at and say ok, you've now had 3-4 years of operations, I can see how I can lend against this.

Now, that of course still makes it difficult for the developers because they've built these assets and are having to go back and improve their capital structure.

Improving contractual and regulatory frameworks also provides mini-grid developers with more sustainable business models that should stand them in good stead for the future, allowing investors to take a more long-term view on critical issues like tariffs and interaction with national utilities.

What is your outlook for grid infrastructure on the continent?

SG:

We are very excited. We're building a team that is able to work with willing governments to help them establish what the right solutions are for them. The opportunities are there and the challenge is to really figure out, for example, what is the right investment plan; what are the operational improvements that are required by the existing grid infrastructure and how can we improve the overall sector sustainability?

Showing that successful grid investment works the first time and can then be repeated, is what will bring in other investors into the sector.

SH:

The biggest challenge or fear is that it just goes on like it has been in the last two to three decades, meaning no material investment in the space either from public or private.

But there is too much pressure now from the 600-700 million Africans that don't have access to electricity for things not to change. Voters are demanding it; the business community isn't being served, and the international community have high expectations.

I do not think what's gone on will continue to go on. It can't afford to.

battery storage

grid connection

Gridworks

mini grid

off-grid

Further reading

- **Geopolitics of Energy: Introduction 101 with Eurasia Group – part 2**

20/08/2020

- **Africa embracing nuclear power**

15/06/2020