

Zimbabwe responding to limitations of hydro power

By [James Shepherd](#)

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There are parts of Zimbabwe where consistent drought is putting intolerable pressure on local communities. Indeed, many rural areas are in difficulty thanks to the impact of the extreme weather, which is said to be caused by the El Niño phenomenon. It is making it difficult for local enterprises and ordinary life to continue as normal.



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A serious knock-on effect of the droughts is a shortage of power. Zimbabwe has bet heavily on hydro power, and those capabilities have been badly affected recently. Specifically, there have been diminished water levels at the Kariba Dam, which contributes 60% of the country's power capacity. In total, hydro accounts for more than [\http://www.iea.org/stats/index.asp 70% of Zimbabwe's electricity generation]].

Risk to power stability

Alternatives simply have to be found. While renewable power sources are growing in popularity across sub-Saharan Africa, it does pose a significant risk to power stability, as Zimbabwe has experienced.

Modular power stations, which consist of diesel or gas-powered generators connected together to be switched on or off according to need, are a great bedfellow for renewables. This is exactly what we are doing at the Dema plant in Eastern Zimbabwe, where we have been commissioned by local utility business Sakunda Holdings to provide 200MW of electricity in the next three years.

Not only will such a strategy help to fill the gap created by the effects of drought on the country's hydro generation, but also it will provide an effective back-up solution if there is a serious technical problem with the national grid.

Resilient and efficient infrastructure

Zimbabwe is diversifying its sources of energy generation and developing a more resilient and efficient infrastructure to mitigate the risk of power loss associated with drought.

There are also implications beyond the borders of Zimbabwe. Diversifying the energy mix is key in all emerging markets, and many could follow Zimbabwe's lead.

We already work with customers contributing to the Southern African Power Pool (SAPP), of which Zimbabwe is the chair and Harare the centre. Where keeping the lights on is the government's first priority, creating an opportunity to contribute to the SAPP and generate funds through international power trade is an advantage. It allows the country to become competitive, grow economically and become self-sufficient.

Dema plan

The effects of the Dema plan are instant. We have already generated one hundred million kilowatt hours of electricity – desperately needed power that would not otherwise have existed. While steps need to be taken to stabilise the Zimbabwean power infrastructure and network, creating a reliable source in the first instance is key.

Modular power is playing a major role in supporting power capacity across Africa. When combined with investment in renewables and a holistic strategy to create a consistent supply, there is no reason to suggest Zimbabwe's power shortages could finally be consigned to the past.

ABOUT THE AUTHOR

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