

BUFFALO ENERGY LTD



Location
Zambia

PROJECT SUMMARY

A convertible note from REPP is enabling British renewable energy developer Buffalo Energy Ltd to progress a diverse pipeline of projects in Zambia with a combined generating capacity of up to 100MW. Of the 100MW, an estimated 30MW will be achieved as a direct result of REPP's support.

Buffalo Energy Ltd was set up in 2016 to develop small-scale projects to provide low-cost electricity to the southern African country's rural communities, most of which currently lack reliable access to modern clean energy and instead have to rely on kerosene and other expensive and polluting fuels for their energy needs.

In 2017, the company raised seed capital to originate several opportunities and initiate development on a six-project portfolio, which includes grid-connected, captive and off-grid schemes employing large-scale solar PV, biomass, wind and mini-grid technologies.

The convertible note has enabled Buffalo Energy to continue to grow its pipeline while also progressing its existing projects through the funding of development milestones. This includes the procurement and management of a wind measurement campaign on a 50MW wind project, and the subsequent completion of the full feasibility study for that project. REPP's support has also facilitated the completion of various environmental and geotechnical studies on a 25MW solar project, and the environmental and topographical studies for a 5MW run-of-river hydro project.

Once built, the six projects will contribute significantly to Zambia's energy diversification strategy and its aim to increase energy access to improve livelihoods (National Energy Policy 2019). They will also support the country's conditional NDC target to reduce greenhouse gas emissions by 47% by 2030 against a base year of 2010.

* Estimate of achieved capacity during REPP's support.



Country policy alignment

Supports Zambia's NDC (2016) targets to reduce GHG emissions by 47% by 2030 and extend the grid to non-electrified rural areas. The project is also well-aligned with the National Energy Policy's (2019) objective of diversifying the energy mix in the country.

AT A GLANCE

Technology

Grid-connected solar PV, wind, and mini-hydro

Project type

Grid-connected and off-grid



Offtaker

Industrials and rural communities

KPIs



GHG emissions avoided: 49,869 tCO₂e per year



People with first-time access to clean energy: TBC



Installed capacity: 30MW*

FUNDING STRUCTURE

Signed: 23 October 2018

Type: Corporate convertible loan

REPP funding: Undisclosed due to confidentiality

SDGs



"REPP funding has enabled us to significantly progress our projects. We have commenced the full feasibility study on the wind project, the meteorological mast has been ordered and the ESIA is underway. The extra funds have also enabled us to originate new projects in the region, including a 3.2MW run of river hydro project in Zambia, and early stage solar and wind projects in Malawi and Mozambique."

Will Dryer, Director, Buffalo Energy Ltd