





PROJECT SUMMARY

Tanzania's first ever wind farm is up and running after a USD 1.2m mezzanine loan from REPP concluded the financing arrangements for the project and improved its overall commercial viability. Commissioned in July 2020, the 2.4MW wind farm is providing much-needed energy security to a growing rural population, and supplying connected communities and businesses sustainably with green power.

Developer Mwenga Hydro Ltd (a project company of the Rift Valley Energy Group) has been operating a 4MW hydropower plant in the Mufindi District of Tanzania's Iringa region since 2012, providing power to TANESCO and its own rural grid network, managed by the developer's own licensed rural distribution company.

The grid, which is the first private large-scale rural network in Tanzania, currently supports more than 5,000 connections across 44 villages, including two tea factories, a dairy farm, two sawmills and 40 primary and secondary schools. It also provides clean energy for dozens of small businesses and workshops using more than 400 productive use of energy appliances, and eight water pumps supplying 3,000 households with clean water. The number of connections is expected to steadily increase to more than 6,500 connections by the end of 2023.

To help meet this continually growing demand and also to counter the hydro plant's varying output due to the region's seasonality of rainfall, the developer embarked on the construction of the complementary wind farm. This hybrid generation structure is now enabling the planned expansion of the rural network to continue, without which generation shortfalls would otherwise arise across the dry season.

Construction of the wind farm created eight full time jobs in 2020, with a further eight permanent positions during the ongoing operational phase, of which six are held by local people. The development also directly supports the rural electrification, climate mitigation and industrialisation targets of Tanzania, where nearly eight million households currently lack access to electricity.

In November 2020, Rift Valley Energy renewed its power purchase agreement (PPA) with Unilever for standby power, which provides important support to this industry, while also ensuring diversification within its customer base.

The successful development and construction of Tanzania's first ever wind farm is improving the prospects of similar future projects in the country and has created a template for other developers to follow. The overarching wind and hydro hybrid development is also the first of its kind in East Africa, and its success is expected to have a strong demonstration effect

Country policy alignment

Supports Tanzania's Updated NDC (2021) mitigation and adaptation priorities, including targets to reduce GHG emissions by up to 35% by 2030 and promote rural electrification and diversification of the energy system. Also supports the implementation of Tanzania's Vision 2025 and the National Five-Year Development Plan 2021/22-2025/26 (2021) through the development of energy infrastructure and contribution towards increasing national generation capacity to 4,915MW and the 85% electricity access by 2026 target.

AT A GLANCE

Technology: On-shore wind

Project type: Grid-connected

Offtaker:

Rural communities and semi-industrial clients



GHG emissions avoided: 3,321 tCO₂e (cumulative)



Improves stability of grid supply



Installed capacity: 2.4MW

FUNDING STRUCTURE

Signed: 20 December 2020

Type: Mezzanine loan

REPP funding: USD 1.2m

SDGs

















Michael Gratwicke, Managing Director, Rift Valley Energy



