Battery research and development lesotho

Battery research and development lesotho

It was a highly competitive international funding in which more than 500 organisations worldwide battled for the lucrative funding provided by Innovate UK in the United Kingdom. In the end, Dr Moeketsi Mpholo, the Administrator of the National University of Lesotho (NUL) Energy Research Centre (ERC), and his international and local team of experts were among 60 (out of 500) organisations who won!

Dr Mpholo assembled an experienced team of local and international experts in renewable energy to claim this gigantic funding. We have Mr Bernie Jones from Science, Technology and Innovation for Development Ltd in the United Kingdom, Mr Anshuman Lath from Gram Oorja in India, and Mr Khotso Mosito from Mos-Sun Clean Energy Technologies (MOSCET) in Lesotho. Each of them is leading their well-prepared armies.

Two rural villages which are not connected to the grid will be selected somewhere in Lesotho. The details of how they will be selected are yet to be finalised. Once selected, the villages" governing structures will be set up or the existing structures will be used to oversee the grid implementation and running.

First, the NUL Energy Research Centre is a hub of knowledge for all kinds of renewable energy expertise. The centre also runs an esteemed Master"s program in Sustainable Energy that is already training a battalion of renewable energy leaders, some of whom will be called to sharpen their skills in this project.

Mr Bernie Jones" organisation from the UK has 8 years experience in setting up mini-grids in several countries over Africa. "We have assisted rural communities to establish and manage mini-grids, with emphasis on good governance of such grids," he said.

As if that is not good enough already, we have Mr Anshuman Lath from Gram Oorja in India. He and his team have applied mini-grids in over 60 remote rural communities in India and a few in some countries in Africa. "We have a huge experience in terms of helping communities to set-up and run such grids," he said.

Then we have our very own MOSCET, a local company best known for its laser focus on providing renewable energy solutions in Lesotho over the years. It will be heavily involved in the implementation of the grids.

Each grid is projected to have a capacity of 30 to 50 kilowatts (kW) of energy. To put things into perspective, the bulk of rural households currently connected to the national grid utilise 30 kWh per month or less meaning a maximum average of 1 kWh per day per household.

This is the reason why ERC recommended to Lesotho Electricity and Water Authority to introduce cheaper rates for consumption of up to 30 kWh in order to relieve poor households, and this has been in force since last year. So, a capacity of 50 kW operating around 10 hours per day gives 500 kWh of energy, enough to power

an average of 500 households!

Electricity will be produced by each mini-grid from the sun"s energy during the day. Then it will be stored in large batteries so that villages can access it even at night when there is no generation. Villagers will pay relatively small amounts of money (tariff) for the electricity they use, compared to the general public.

Interestingly, a certain percentage of the fund will be used to assist the villagers to power community entrepreneurial activities or community social centres. Such entities will also benefit from the grid generated power.

"The project aims to pilot an Independent Power Producer (IPP) mini-grid Technology in Lesotho, and to demonstrate that they can be a sustainable solution compared to the present policy of grid extension which is not only expensive to implement, but the beneficiaries can"t even afford the tariffs which increase on an annual basis," Dr Mpholo said.

Contact us for free full report

Web: https://hollanddutchtours.nl/contact-us/
Email: energystorage2000@gmail.com
WhatsApp: 8613816583346