

WINCH



Location
Sierra Leone and Uganda

PROJECT SUMMARY

Plans to build a portfolio of 49 solar PV mini-grids in rural Sierra Leone and Uganda are progressing well following a USD 4.2 million loan from REPP and co-funder, FMO.

Once built, the mini-grids will provide clean, reliable and cost-competitive electricity to 55,000 people across the two countries, which have among the lowest electrification rates in the world. Currently, around 23% of Sierra Leone's population is connected to electricity, which is considered a significant impediment to the nation's growth and development, with the majority of households in rural areas dependent on kerosene, candles, fuel wood and charcoal. The situation is similar in Uganda, which has a rate of electrification of around 41%, although this is far lower in rural areas.

Under the plans, developer Winch Energy Limited is constructing and operating 24 mini-grids in Sierra Leone and a further 25 in Uganda, with a combined capacity of 2.2MW.

REPP's loan will enable the company to scale up its operations, which in turn will improve the likelihood of securing more funding and building further mini-grids.

The mini-grids being used in the project have been developed by Winch Energy and employ a remote power unit (RPU), a containerised solution with canopy-mounted solar PV panels with battery storage, delivering a reliable electricity supply to rural areas.

As of June 2022, Winch had delivered 25 RPUs to Uganda, which were built and assembled in Winch's facility in Sicily, Italy. All 25 mini-grids in Uganda and 12 mini-grids in Sierra Leone are now operational, currently providing electricity to over 3,600 customers, businesses, public buildings and industrial customers. The remaining 12 mini-grids in Sierra Leone will see an additional 3,000 customers connected and are expected to be commissioned in Q3 2022.

Around 100 people have been employed during the construction phase of the project, with over 20 full-time employees during operation.



Country policy alignment

Project supports both countries' NDC targets to reduce GHG emissions by 2030 and promote renewable energy development in rural areas, and contributes to Sierra Leone's conditional national electrification target of 95% by 2030 (Updated NDC, 2021) and Uganda's 100% electrification by 2030 target (Draft Revised National Energy Policy, 2019). Improving energy access through renewable energy supports the implementation of Sierra Leone's medium-term development vision 2019-2023 and Uganda's National Development Plan III (2020/21-2024/25), as well as Uganda Vision 2040 target of achieving 5GW installed solar PV capacity by 2040.

AT A GLANCE

Technology:

Solar PV mini-grids



Project type:

Off-grid

Offtaker:

Rural communities

KPIs



Greenhouse gas emissions avoided: 964 tCO₂e per year / **Achieved: 65 tCO₂e (cumulative)**



People with first-time energy access: 55,000 / **Achieved: TBC**



Planned capacity: 2.2MW / **Achieved: 1.4MW**

FUNDING STRUCTURE

Signed: 17 September 2021

Type: Senior term loan

REPP funding: USD 2.1 million

SDGs



"We are obviously delighted with the closing of this debt financing from FMO and REPP, which represents a landmark for the off-grid industry in Africa and worldwide. This first tranche represents the beginning of our investment program with our partner NOA and soon to follow will be additional investments in Sierra Leone and Uganda and we are also targeting Nigeria and Ethiopia for 2022."

Nicholas Wrigley, CEO, Winch Energy