

GVE NIGERIA



Location
Nigeria

PROJECT SUMMARY

The Green Village Electricity (GVE) project is a rural electrification scheme designed to provide clean and reliable energy to off-grid rural communities in Nigeria based on a Pay-As-You-Go (PAYG) revenue collection system.

Developed by GVE Projects Ltd, the plan is to construct isolated mini electricity distribution grids in 72 villages across seven states in Nigeria, each with an installed capacity of between 24kW to 500kW, depending on the size of the community.

Once completed, the mini-grids will provide first-time energy access to an estimated 73,500 people, directly supporting Nigeria's high-priority target of 90% energy access by 2030 (Rural Electrification Strategy and Implementation Plan 2016).

REPP is providing funding and access to long-term debt to help build the project into a sustainable business that can attract funding from private sector financial markets, while at the same time contributing towards its own objective of transforming the energy sectors in target countries.

As of the end of 31 March 2021, four of the 72 sites had been completed, resulting in a 0.43MW increase in renewable generating capacity and the connection of 11,725 people to electricity for the first time. ESIs had been completed for all the sites, and commercial operation of up to eight sites was expected by the end of 2021. The developer employed 181 construction staff and 121 operations staff through the project in 2020, and reported providing electricity to over 100 critical services such as schools, clinics/hospitals and/or waterworks/water pumping stations.

Mini-grids offer multiple benefits for Nigeria's rural communities, where access to electricity is sometimes as low as 5% of households. The GVE pilot projects, for example, reported a 40% reduction in energy-related expenditure for their customers, while also increasing productivity, particularly for agro-processing facilities.

Proving the business model and viability of this project is expected to then attract international investors interested in developing the small-scale renewable energy sector in Nigeria.



Country policy alignment

Supports Nigeria's NDC (2017) conditional target to reduce GHG emissions by 45% by 2030 including by providing 13GW installed renewable energy capacity from off-grid solar PV to support rural areas. Project is strongly aligned with the Nigerian Government's 'new paradigm for rural electrification' – delivering energy access through a combination of centralised and decentralised approaches.

AT A GLANCE

Technology:

Solar PV
mini-grids



Project type:

Off-grid

Offtaker:

Off-grid communities

KPIs



GHG emissions avoided:
5,957 tCO₂e per year



People with first-time access
to clean energy: 73,500



Installed capacity:
2.72MW

FUNDING STRUCTURE

Signed: 29 December 2016

Type: Development capital

REPP funding: USD 288,000

SDGs



"GVE's young, dynamic and visionary team is overjoyed to be playing such an important role in the creation of a new, clean energy future for Africa. Thanks to the combined passion, dedication and resilience of our renewable energy sector, over 600 million Africans with no access to decent electricity can now see a bright light at the end of the tunnel."

Ifeanyi B. Orajaka, Managing Director, GVE Projects Ltd