

# ARC POWER RWANDA



Location  
Rwanda

## PROJECT SUMMARY

The first phase of this ambitious scheme to install a large portfolio of mini-grids in Rwanda is under way thanks to a £600,000 convertible loan from REPP.

REPP's early-stage support has been critical to enabling British-based developer ARC Power Ltd to progress with its first eight installations in Bugesera District. Once completed, the mini-grids will have a combined generating capacity of 0.12MW and will meet the energy needs of around 5,600 people in Rwanda, which currently has an estimated national electrification rate of 30%, and just 12% in rural areas.

The mini-grids are portable and modular, and can each connect between 100 and 600 households or businesses in a village, providing A/C power for lighting and mobile charging, as well as appliances and machinery, enabling the development of small businesses.

Electricity from the mini-grids will be offered on a pre-pay, PAYG basis with no connection charge to off-grid communities. Currently, these people have no access to clean energy, and instead mostly rely on more expensive and polluting fuels such as kerosene.

If the initial roll-out is a success, REPP intends to follow on with a larger construction loan to complete phase two, which will boost the project's total generating capacity to 3.5MW.

The project directly supports Rwanda's NDC targets to establish up to 100 solar PV mini-grids in rural communities by 2030 and boost their income generating potential.

## AT A GLANCE

### Technology

Solar PV  
mini-grids



### Project type

Off-grid

### Offtaker

Off-grid  
communities

## KPIs



Greenhouse gas emissions avoided: Phase 1: 263 tCO<sub>2</sub>e p.a., whole project: 7,665 tCO<sub>2</sub>e p.a.



People with new energy access: Phase 1: 5,600, whole project: 164,000



Installed capacity: Phase 1: 0.12MW, whole project: 3.5MW

## FUNDING STRUCTURE

**Signed:** 18 February 2019

**Type:** Convertible loan

**REPP funding:** £600,000

## SDGs



*"We have huge ambitions for ARC Power in Rwanda. The funding from REPP will allow us to press forwards with our national rollout, providing affordable, reliable and clean power to around 150,000 people in these next two phases."*

*Karl Boyce, CEO, ARC Power*