

# POWERHIVE

## PROJECT SUMMARY

Around 90,000 people living in rural Kenya are set to gain first-time electricity access after REPP approved a USD 3m results-based financing facility for this first-of-kind mini-grid project.

Developer Cloverfield Energy Services Limited (Powerhive) is currently building 100 ground-mounted mini-grids that will supply clean energy to rural communities in the Kisii and Nyamira regions of south-western Kenya.

REPP's financing facility is enabling Powerhive to grow to a sufficient scale to attract additional debt and equity finance, and continue building mini-grids in Kenya.

So far, the company has installed 24 operational grids with a total generating capacity of 0.9MW, resulting in over 24,800 people being connected to electricity for the first time. Once they are all operational, the mini-grids will provide up to 1MW of generating capacity.

Through the project, electricity is sold directly to local households and micro-businesses by Powerhive on a prepayment basis. Each system includes batteries to offer reliable power to customers.

Powerhive has also introduced a micro-financed poultry programme to customers, which has financed seven chicken brooders and built 25 brooder houses in partnership with a village community in Kisii County in Kenya, providing livelihood opportunities for approx. 130 people, generating a new income stream of USD 150-250 per person, per month. Brooder owners are provided with continuous training and capex financing.

In addition, the company has provided financing for electric pressure cookers to encourage less carbon-intensive cooking, and has facilitated the roll out of electric mills, motorbikes and tuk-tuks, and hatcheries across its sites. These economic opportunities support climate-resilient agricultural practices, enhancing livelihoods and increasing the overall resilience of the project community.

Up until 2016, mini-grids were not licensed but "tolerated" in Kenya. Powerhive broke new ground when it became the first private company to be licensed for developing mini-grids. The success of the venture has arguably made it easier for other private developers to operate in Kenya and may have contributed to the government's increased attention to the sector. The new mini-grid regulations are currently in an advanced stage of development, expected to be finalised in 2022.



### Country policy alignment

Supports Kenya's Updated NDC (2020) mitigation and adaptation goals, which focus on increasing solar-based generation, strengthening the resilience of energy systems and ultimately contributing to the abatement of GHG emissions by 32% by 2030. Powerhive also contributes to the aims of Kenya's "Big Four" agenda (2018) by fostering a wide range of productive use activities (e.g. milling, brooding) in its projects.



### Location

Kisii and Nyamira counties, Kenya

## AT A GLANCE

### Technology:

Solar PV  
mini-grids



### Project type:

Off-grid

### Offtaker:

Off-grid  
communities

## KPIs



GHG emissions avoided:  
2,190 tCO<sub>2</sub>e per year (target)  
/ **Achieved: 875 tCO<sub>2</sub>e**  
(cumulative)



People with first-time access  
to clean energy: 90,000  
(target) / **Achieved: 24,806**



Installed capacity:  
1MW (target) / **Achieved:**  
**0.9MW**

## FUNDING STRUCTURE

**Signed:** 24 May 2018

**Type:** Debt

**REPP funding:** USD 3m

## SDGs



"The REPP facility has been critical to unlocking the potential of microgrids for Powerhive in Kenya. In addition to providing equity investors with a framework to understand how Powerhive's microgrid projects can be leveraged by project debt, it is also a great show of confidence in our data-driven platform, which we intend to deploy across Kenya and more broadly Africa in the future."

Christopher Hornor, Founder and CEO, Powerhive