

MANUFACTURING AFRICA



Manufacturing Africa aims to reduce poverty in Africa by attracting £1.2 billion of foreign direct investment into manufacturing and creating 90,000 jobs over 7 years (2019-2026). The programme is funded by the UK government through the Foreign, Commonwealth & Development Office (FCDO)



Driving Innovative Cool Storage Solutions for Off-grid Regions in Africa

Koolboks Limited is a technology-enabled renewable energy refrigeration company that provides cost-effective cooling solutions in Nigeria and globally. According to Koolboks, their refrigerator can store energy for up to 4 days in the absence of power from the grid or generators through its proprietary ice-battery design and technology in combination with solar/photovoltaic energy.

The ice batteries are charged by photovoltaic energy supplied by solar panels during the day and release cold at night. In the absence of sunlight, the lithium-ion battery incorporated in the unit provides the energy required to maintain cooling.

In addition, the units are made thicker than regular freezers which allows the system to stay cool for a long period without power.

Koolboks has incorporated a pay-as-you-go (PAYGo) technology into its refrigerators that allows the company to offer Cooling-as-a-Service (CaaS) and lease-to-own subscription models to address the challenges of affordability and accessibility.

The PAYGo technology is enabled by using mobile money and GSM-based machine-to-machine connectivity to remotely control and monitor the refrigerators' usage, billing and performance.

Its products are targeted at entrepreneurs, SMEs and small-scale agro processors who require refrigeration to generate income for their businesses as well as healthcare centres in need of cold storage for preservation of medication and vaccines.

+60%



of farm produce is wasted due to scarcity of good storage facilities in Nigeria

\$4 Billion



annually lost in Nigeria through food wastage

55%



more vaccine storage capacity is needed to adequately meet requirements

17%



refrigeration penetration rate in Africa due to affordability and poor electricity access

THE CHALLENGE

Koolboks is seeking **\$33 million** in capital to fund its expansion into new markets, bulk procurement of equipment and commencement of local manufacturing production in suitable locations in West and East Africa.

OUR SUPPORT



- A MARKET ASSESSMENT:** MA's market assessment support was aimed at positioning Koolboks for its next growth phase. The study showcased the market size of the cold storage opportunity in Sub-Saharan Africa, developed a comparative analysis of the total cost of ownership of a Koolhome product vs. alternatives, developed clear business cases for identified customer segments in key countries (Nigeria, Kenya, DRC) and advised on a suitable location for the establishment of local assembly facilities in East Africa (either Kenya or Rwanda)



- B INVESTMENT MEMORANDUM (IM):** MA team supported Koolboks in developing the IM using company provided information and relevant analysis from the market assessment



- C ADVICE ON APPROPRIATE INVESTMENT INSTRUMENTS:** MA team provided information and analysis to enable Koolboks to decide on appropriate investment instruments and amounts



- D REVIEW AND UPDATE OF EXISTING FINANCIAL MODEL:** MA team reviewed existing financial model



- E VALUATION ANALYSIS:** MA team determined a range of value for Koolboks' Series A fundraise



IMPACT



The market assessment is a key reference document in Koolboks' engagement with investors as it has enabled the company to convincingly demonstrate the cold storage market opportunity in Africa to key stakeholders



The documents prepared by MA as part of the support have been included in the data rooms created by Koolboks to facilitate due diligence and discussions with investors who have expressed interest in investing in the next round



As a young start up with limited resources; MA's support in preparing the deal documents has enabled Koolboks to raise an initial **\$3.2 million** in funding with subsequent raises in the pipeline.

QUOTE FROM COMPANY REPRESENTATIVE

Startups struggle to credibly present their market opportunities to investors because it is costly to do a proper market assessment in the early stages of a company. MA provided us a detailed assessment that focused on SSA, focusing on our target market, and taking into consideration the unique power supply situation on the continent. The specifics helped support the assumptions that fed the financial model and structured the financial opportunity for investors in a way that is credible.



Natalie Casey, Chief Business Officer, Koolboks

This programme is funded by UK aid from the UK government; however, the views expressed do not necessarily express the UK government's official policies.

CONTACT US

Website: www.manufacturingafrica.org

Email: info@manufacturingafrica.org