







### **2023 IMPACT REPORT**

# **Energizing Healthcare** in Uganda

## 82,000 people with access to improved healthcare service

Nyumanzi Health Center 7.7kW solar PV + 19KWh storage Juru Health Center 9.6kW solar PV +19.2KWh storage Ayiri Health Center 9.6kW solar PV +19.2KWh storage



■ Equipment & Installation
■ Nyumanzi: \$33,812
■ Juru: \$30,720

Ayiri: \$32,546

Design + O&M: \$19,616Management: \$11,262

Total Cost: \$127,956

MADE POSSIBLE BY FUNDING FROM NEXTRACKER, EKO ENERGY, CHRISTADELPHIAN MEAL-A-DAY OF THE UNITED KINGDOM, AND DONORS LIKE YOU Imagine tending to 680 live births a year, delivering pre and post natal care, and providing standard medical care for 40,000 patients annually, all with only two hours of electricity a day. Until recently, that is what the team at Nyumanzi Health Clinic in Uganda were doing. Their experience is mirrored at over-stressed health centers across the country. As a haven for refugees in the region, Uganda has welcomed new residents into their healthcare system, with clinics serving refugees and local residents together. Many of these crucial centers are in resource-poor districts at locations well off the national power grid.

In 2022, <u>Green Empowerment</u>, <u>Medical Teams International</u>, and <u>Mandulis Energy</u> came together to provide reliable, 24-hour renewable energy solutions to three health facilities, serving a combined population of over 82,000 people in Uganda. Each facility was equipped with a solar PV + storage system designed to

meet the current and growing needs of the clinics: 7.7kW system at Nyumanzi Health Center and 9.6kW systems at Juru & Ayiri Health centers. For long-term sustainability, clinic staff were trained in basic operation and maintenance of the solar equipment and each system was equipped with remote monitoring tools, providing a combined approach of local upkeep with remote support.

Before the project, these centers had only 1 - 6 hours of unreliable electricity access per day. Now 24-hour access is elevating and accelerating care at these centers. From ultrasound machines and lighting for nighttime births, to oxygen concentrators for patients in critical care, to sterilization tools, electricity powers the equipment that medical staff need in order to provide the highest quality treatment. With this vital resource, staff can now see more than twice as many patients in a day.





Ayiri Health Cente

#### LIFE CHANGING POWER

This time round I felt pain and came here because I was told there was a TV [ultrasound]. When I went for a scan, a cyst had started developing inside my uterus and had gradually weakened my body and got me so worried about my baby. I thank the doctors because they were able to discover it in time and treat it."

NYAKER MAKER, MATERNITY PATIENT AT NYUMANZI HFAI TH CLINIC

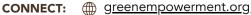
"Before solar power came in we were always overwhelmed when we had emergencies that needed oxygen because power from the generator was not enough to run equipment and sometimes the generator had no fuel."

WINNIE ONGOM, CLINICAL OFFICER AT NYUMANZI HEALTH CLINIC

## THE DREAM TOOL: WHY THESE CLINICS FIRST?

With clinics across Uganda, Medical Teams International faced a dilemma: given limited resources, where could investing in energy access create the biggest impact? To make an informed plan, they deployed Green Empowerment's DREAM Tool at 56 of their clinics. The tool uses detailed information that medical staff input via an app on their phones to rank clinics within a large system according to criteria set by the medical provider. Nyumanzi, Juru, and Ayiri health

centers were selected for pilot installations because of their robust maternity care units, their limited energy access, and the projected growth in the populations they serve. The DREAM tool helped prioritize these clinics and with site specific data even assisted in the first stages of design on each system.



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